User’s Manual for Sigma 3000

Ver4. 47

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Chapter 1 Introduction

Sigma 3000 is a display software specially designed and developed for off-line control systems. This software is powerful with many function tools. Sigma 3000 can be used to make NMG files and display the contents which would need the support of a font library, or to make PMG files and display the dot matrix files which don't need the support of a font library. The software can also convert AVI/GIF files to FLW animation files. Users can use the Sigma 3000 to check or modify the parameters of the display, or use it to monitor the working status of the sign. At the same time, the Sigma 3000 is also a wonderful display file manager, which allows the users to schedule files and update their own display contents.

Users will see the following log-in interface whenever they open the software. There are two users by default. One is the administrator user, both the username and password are "admin". The other one is normal user, both the username and password are "user". If users want to upgrade or modify the settings of a display, they have to log in with the "admin". If users only want to send or edit some files, only need "normal user" to log in.

Fig. 1.1 The log-in interface

Input User Name and the password, and click OK. The following interface of Sigma 3000 will show up as Fig 1.2 shows.

As we can see from the above figure, there are 5 main parts that constitute Sigma's Interface. 1 is the menu bar, where the user can find all tools and functions. 2 is the panel of short-cut keys, where user can realize the setting and send all types of files. 3 is the work area. 4 is the area of file scheduling. 5 is the key editing area in Sigma, where all display control buttons can be found here.

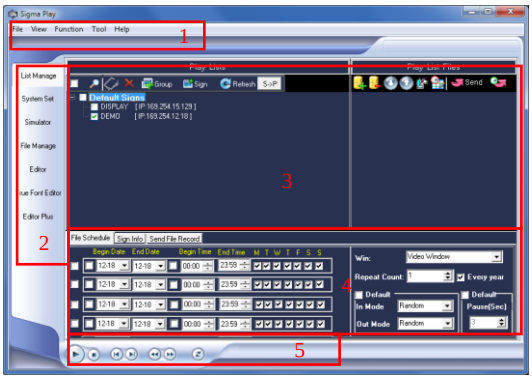


Fig. 1.2 Sigma 3000 Software Interface

In the following chapters, we will separately introduce the usage and functions of the software in Sigma; in chapter 2, we are going to talk about the Sigma Editor; in chapter 3, we will introduce True Font Editor; in Chapter 4, here comes the Font Manager; in chapter 5, we will know how we can use the tools in Sigma; and in the final chapter 6, we will tell the usage of the panel of short-cut keys and the rules to follow when using.

System platform：Windows 95, Windows 98, Windows 2000, Windows XP, Vista, Windows 7 and Windows 8.
System ： CPU 500MHz, Memory 64M

Chapter 2 Sigma Editor

Sigma Editor, which has an independent version number, is professional and powerful software that aims at editing and programming display files. Users can use the Sigma Editor to send files to the LED sign after editing, or preview the files in the simulator. With the help of the Sigma Editor, users can insert pictures to the sign, or make the picture to be the background of other files. What is more, the functions of time count-down and count-up can also be found in Editor. Sigma Editor consists of 5 parts:① Menu bar; ② Tool bar; ③Mode bar; ④ Editing bar; ⑤Status Bar.

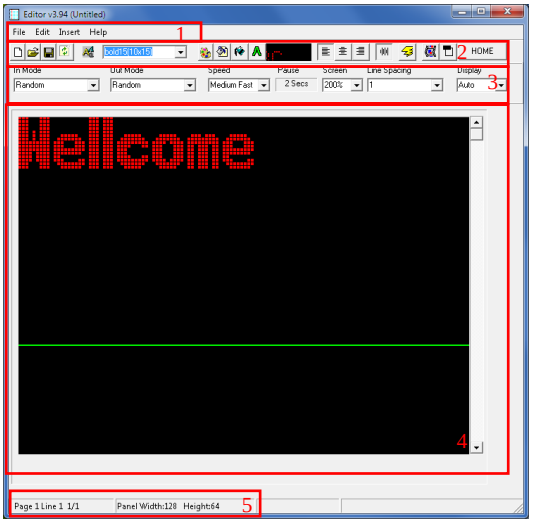


Fig. 2.1 Sigma Editor Interface

2.1 Menu Bar

2.1.1 File Menu

As Fig 2.2 shows, there are 8 items under the Menu File.

New: Open a new file;

Open: Open an NMG file;

Save: Save the file;

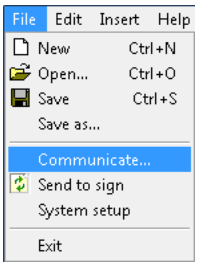
Save as: Save the file under the name…;

Communicate: The setup information of communicating between the computer and the sign;

Send to sign: Send the edited files to the sign;

System setting: Set the screen size;

Exit: Exit Sigma Editor.



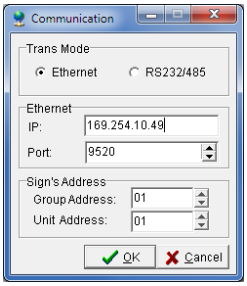


Fig. 2.2 File Menu Fig. 2.3 Communication Setting

As is seen from Fig 2.3, the communication interface tells us the following information: current Trans Mode is Ethernet, IP address 169.254.10.49, Port 9520. Group address: 01. Unite address: 01. (Note: we will refer to the Group Address and the Unite Address as GGUU in the following chapters. E.g.: 0102 means Group address 01, Unite Address 02) Only QS5800 series need to connect with specific port 9520, and other control boards have no special limits.

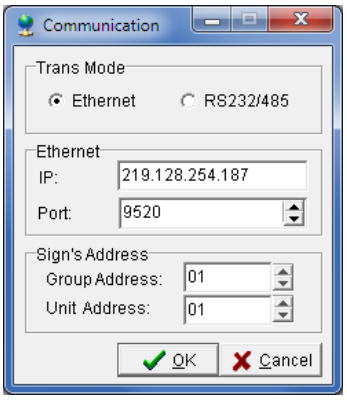


Fig. 2.6 Communication through an outside net

Here we need to know what Port, Group address and Unit Address are. Now let's get to know what Port is and what port is for first. GG stands for Group Address, while UU stands for Unite Address. With the help of GGUU, we can communicate with 99x99 LED signs. Please note that 0000 means the

broadcast address. If we are searching for one certain LED sign, we can use the broadcast address to communicate with other GGUU. GGUU is meaningful to our management of the LED signs. For example, we can set up the signs in the workshop as a group. In this case, all the signs in the workshop are with the GG “01”. Every LED sign is a separate unit, with the UU ranging from 01~99. What is more, we can set all the signs in the office as group 2, with GG 02, and different UU to communicate with... Under such circumstance, we can manage all the signs according to different groups. Even with the same IP address, we can still tell the signs apart from the different GGUU.

The other Trans Mode is serial port. As shown in Fig 2.7, Serial Port refers to COM 1 in the computer, with GGUU 0101.

Sigma Play will check the Baud rate of the sign if Serial Port is used for the 1st time. The communicating interface will disappear once the Serial Port receives the data back from the sign, which means communication succeeds. Otherwise the software will tell that communication failed.

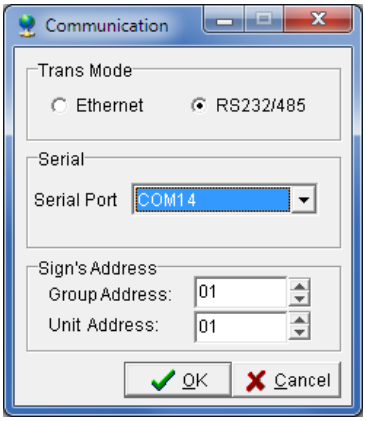


Fig. 2.7 Serial Port Interface

2.1.2 Edit Menu

As show in Fig 2.8, most of the function is the same as the tool bar.

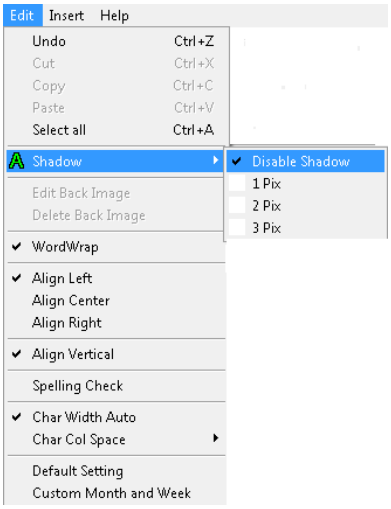


Fig. 2.8 Edit Menu

Undo: Cancel the last operation

Cut: Cut chosen text or graphics in the editing area

Copy: Copy the chosen text or graphics in the editing area

Paste: Paste the chosen text or graphics to the editing area

Select All: Choose all the content in the editing area

shadow： You can add a box around a character or some characters, but you cannot see the box unless in simulator or display mode. The display effect is as in A1：

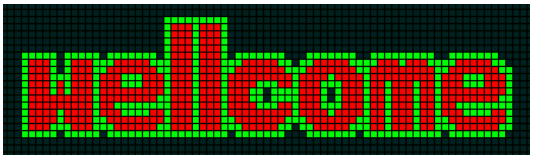


Fig.A1

Edit Back Image: Edit the background picture in the editing area

Delete Back Image: Delete the background picture in the editing area

Word Wrap: Automatic line-change

Align Left: Text align left horizontally

Align Center: Text align center horizontally

Align right: Text align right horizontally

Align Vertical: Text align center vertically

Spell Check: Checking the spelling of words

Default setting: The default editing mode in

Sigma Editor, as in Fig. 2.9:

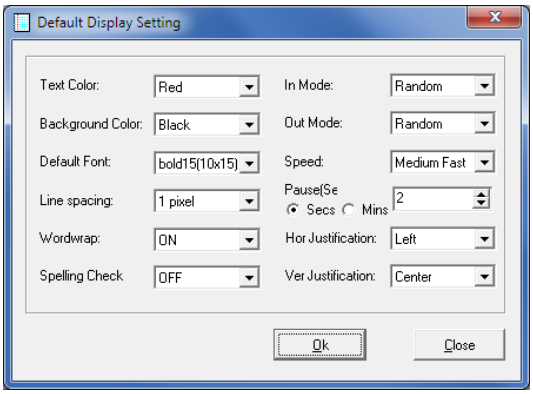


Fig. 2.9 Default Display Setting Interface

We can see that there are 12 default settings in the figure. Press OK, Sigma Editor will follow those default settings when a new file is opened for editing.

Custom Month and Week: The default display of month and week, as in Fig. 2.10:

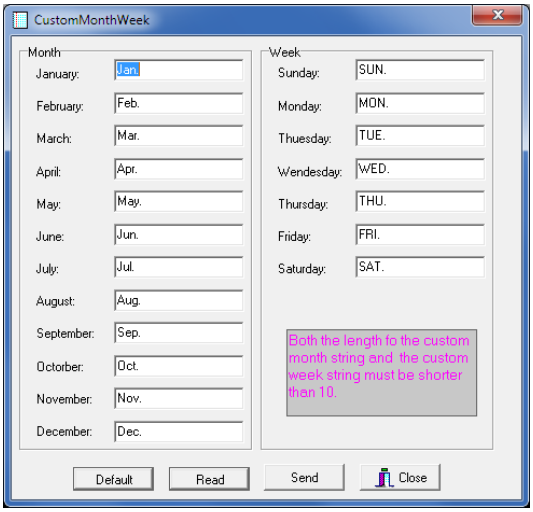


Fig. 2.10 Default Display Setting Interface

After sending the custom settings, add month and week, the screen will display the custom content.

2.1.3 Insert Menu

From Fig 2.11, we can see that there are 8 options under Insert Menu. Here we will introduce the functions of these 8 options.

Insert Picture: Users can insert the picture (BMP format) to the editing area, as Fig 2.11 shows. Choose one BMP file, click OPEN. The BMP file will be added to the editing area. Users can send the file to the sign.

Then the picture will show in the editing area.

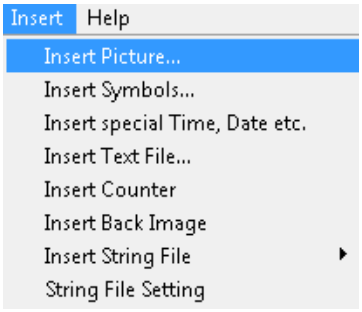


Fig.2.11 Insert menu

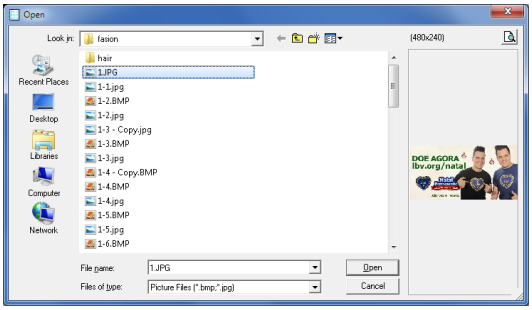


Fig.2.12 Insert picture

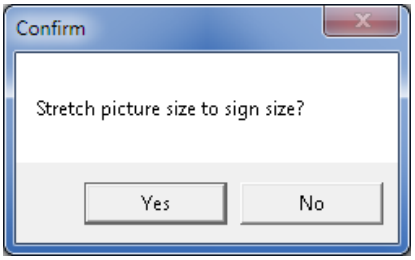


Fig.2.13A

Fig. 2.12B Picture in the Editing area

As can be seen in Figure 2.12, if the inserted

picture is larger in size than the size of the LED screen, you will see a prompt asking you whether you want to stretch the picture size to the LED screen size. If you press Yes, you will see the picture in Figure2.12B.

Insert Symbols: This function helps the user to insert some special symbols whenever they need. Sometime we find that it is not that convenient to insert some special symbols, because they can't be found on the keyboard. That is why we need the function of "Insert Symbols". As shown in Fig 2.13, we can see the special symbols and characters of font Normal130. The symbols and the characters vary with different types of fonts.

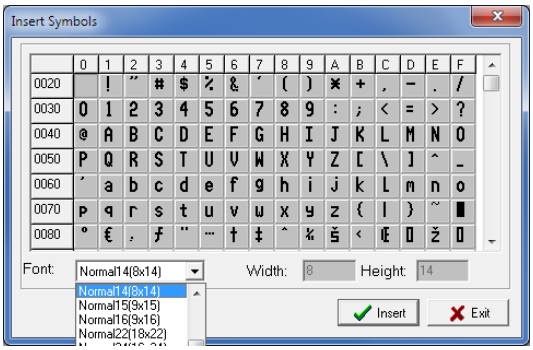
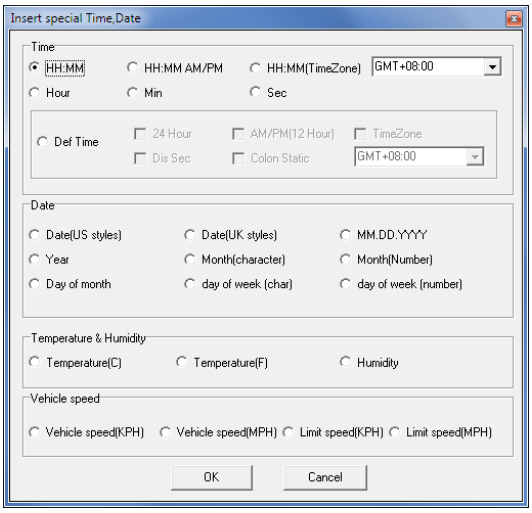


Fig. 2.14 Insert Symbols Interface

Insert Special Time, Date, etc. With this function, users are able to insert time of different world time zones, temperature, date, week, and humidity to the sign. Before inserting any time and date, we should correct the time of the sign with the computer's first, otherwise we might think there were some problem with the time. Before we insert humidity and temperature, we also need to be sure that we already have the humidity and temperature sensor. Otherwise, humidity and temperature will be shown as NA on the sign. Special note: Even with the temperature and humidity sensor, when we insert temp & humidity, it would be shown as NA in the editing area, but this would not affect the information shown on the sign.



Insert Text File: This function enables the user to insert the txt. File directly without inputting any message again to the editing area. Sigma Editor will paste the txt. File directly to the editing area once the file is chosen. This function accelerates the programming speed and reduces the inconvenience during programming.

As shown in Fig 2.16, click Open to choose the txt. File that we want.

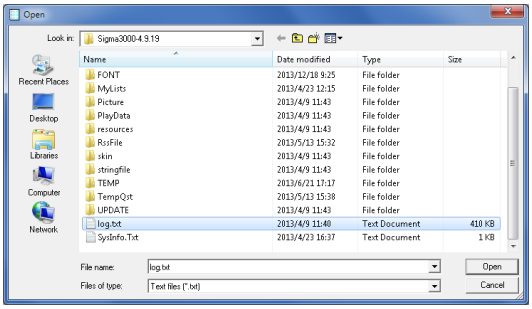


Fig. 2.15 Interface of inserting txt. File

Insert Counter: With this function, users will be able to insert a counter, either down-counter or up-counter. From Fig 2.16, we can see that in the counter interface, we can count either time or objects. The coefficient of correlation rang from 0.1~999. We can notice that there are two count types—counting up and counting down. We can also choose to count by days, hours, or by seconds. Or we can choose to input %d (% of days), %h (% of hour), %s (% of seconds) directly to the editing area.

What is coefficient of correlation?

For example, we set the coefficient as 100. If we would like to count down for 2 days time, the coefficient will multiply the number, which makes 200. Only till the days remains 1 day left then it makes the outcome 100.

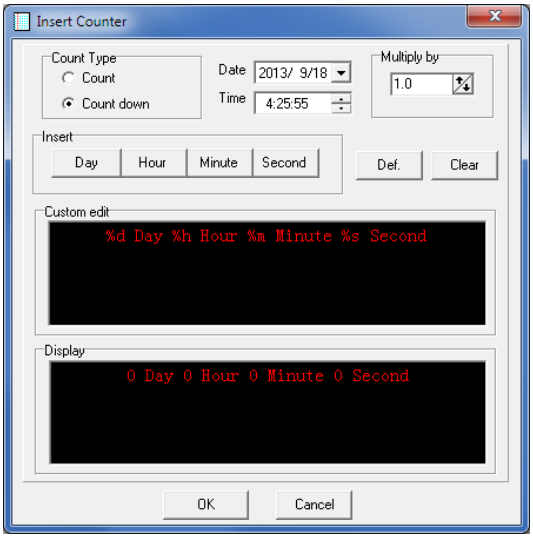


Fig. 2.16 Insert counter interface

Insert Back Image: With this function, users can find it convenient to edit and program the file with both text and graphic. With this function, user is able to program the same content to every frame, or set different background picture in each frame. Or users can even edit some text suspending above the picture. Here is an example, as shown in Fig 2.18. We now would like to choose one picture (BMP file) as the background. We will see an interface asking us if we would like to set for "All frame", "Current frame" or "Select frame". After we select the function that we want, we can add some text to the back ground.

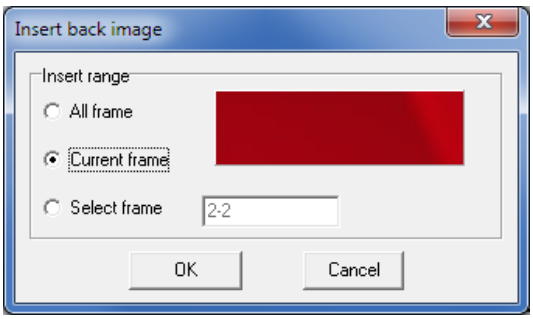


Fig. 2.18 Insert Back Image Interface

From Fig 2.18, we can see the effect of a file which is added with some text.

Special note: Only one display mode is available for the test that insert.

Fig. 2.19 Back-ground picture with text

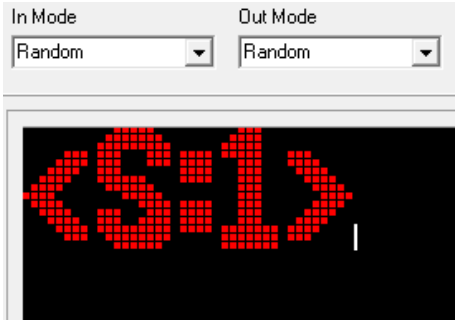


Fig 2.20 insert string interface

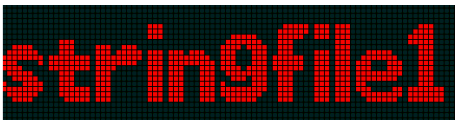


Fig. 2.21 display shows the content of string 2 interface

String file setting: With this function, users can edit the content of string file as in Fig. 2.22. Select the string file that need to edit, for example, select string 1 and string 2. Edit the content that need to be displayed in the right area of the screen and click on "OK", then insert those string files into the "Editor" interface, as in Fig.2.20 and Fig.2.21.

If there is a string file displayed in the control board, users only need to modify the display content as the steps showed above and click on "Send Selected String To Sign". If users want to modify several string files at the same time, edit the content and click on "Send All Strings To Sign", and all string files can be modified as in Fig.2.22..

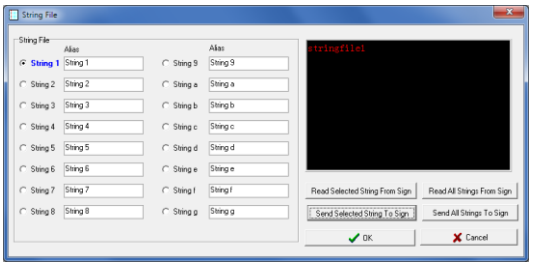


Fig.2.22 string file setting interface

2.1.4 Help Menu

In the Help Menu, we can find the version number of Sigma Editor, as Fig 2.23 shows.

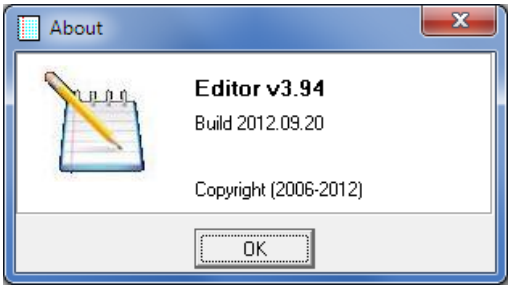


Fig. 2.23 About Sigma Editor

2.2 Tool Bar

There are several types of tools in Tool Bar: File tool, Color tool, Align tool and other tool. Here we are going to introduce the usage of these several types of tools.

File Tools

: Open a new NMG file

: Open the NMG files

: Save the file

Color Tools

: Palette of the font color

: Back-ground palette of fonts

: Back-ground palette of frame

: Shadow

Align Tools

: Horizontal left align

: Horizontal center align

: Horizontal right align

: Vertical center align

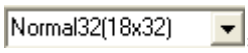
Other Tools

: Short cut key for sending files

: Set flashing feature for a certain character or picture

: Simulated display, as Fig 2.24 shows

: Insert a title, as Fig 2.25 shows



: Choose the font type

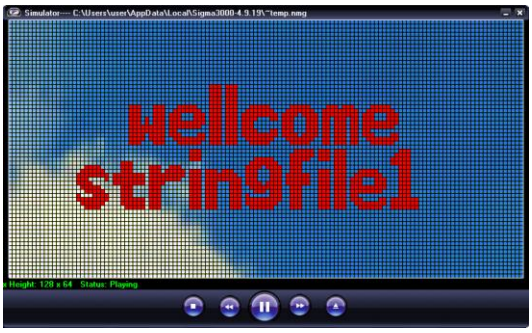


Fig. 2.24 Simulated display

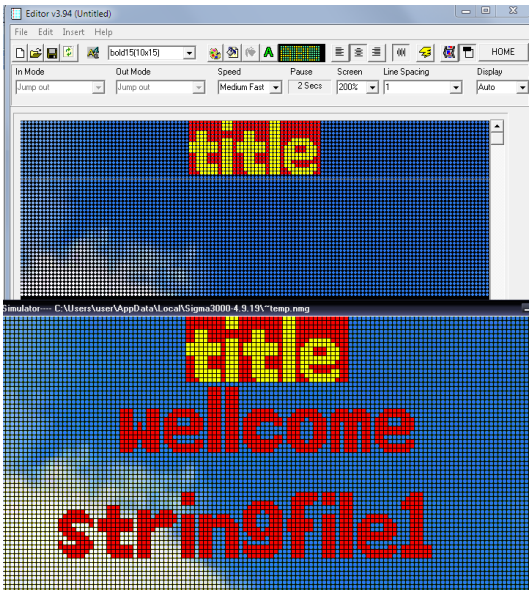


Fig. 2.25 Insert a title

2.3 Mode Bar

Fig 2.26 shows the Mode Selecting Bar in the Editor.

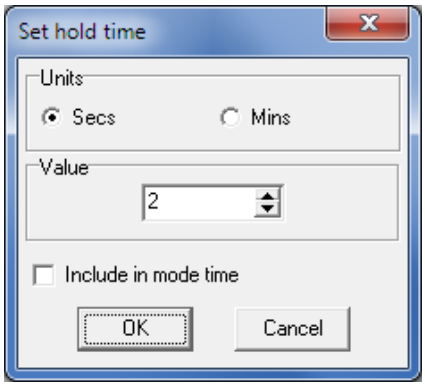
Fig. 2.26 Mode Bar

In mode: The display mode of a file when it goes into the sign;

Out mode: The display mode of a file when it goes out of the sign;

Speed: Display speed of each frame;

Pause: Pause/hold time of each frame. Fig 2.27 shows the interface of Set Hold time. We can see that the pause time of the in-mode can also be included. That is the pause time = in mode time + out mode time.



Set Hold Time

Zooming: If the title is too large, we can zoom the editing area in order to make the program more convenient;

Line Space: Users can set the space of between 2 lines, with the Max value 9 and min value 0. The unit of the line space id by pixel.

Display Mode: Only jump out and chasing mode is available.

2.4 Editing Area

The Editing Area provides users a platform to edit the files and display the message. Users can perform the operation like inserting picture, time, temperature, humidity, text files, counter down and counter up etc. All files that saved will be with the suffix name of NMG.

If we click the right key, we will see a Right-key menu, as it is shown in Fig.2.27.

We have introduced these functions in the previous parts. This menu makes the program more convenient and quicker.

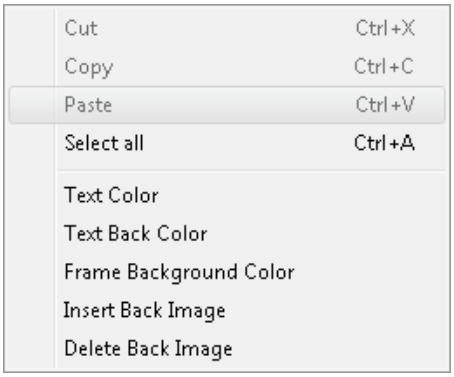


Fig. 2.27 Right-key menu

2.5 Status Menu

Status Bar indicates the current information of the current editing file. For example: `Page 1 Line 1 1/1` means the current editing page and the position of the cursor. `Panel Width:128 Height:64` indicates that the current editing file can be used for the sign with 64 pixels height and 128 pixels wide.

Chapter 3 True Font Editor

True Font Editor is a kind of editing tool for editing dot matrix files. The most obvious advantage is that it can edit any font in the computer system and show them on the LED display without downloading font list onto the display.

Fig 3.1 shows the process of opening the True Font Editor. Choose Tool→Edit file →True Font file.

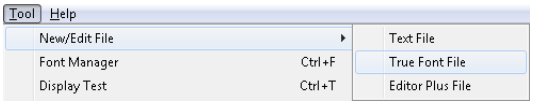


Fig 3.1 Choose dot matrix

As Fig 3.2 illustrates, True Font Editor has the same layout as Sigma Editor. 1--- Menu Bar, 2---Tool Bar, 3---Mode Bar, 4---Edit Area, and 5---Status Bar. The following is the introduction of their functions.

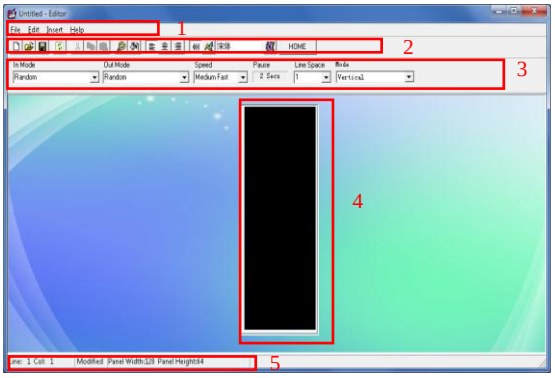


Fig. 3.2 True Font Editor Interface

3.1 Menu Bar

3.1.1 File Menu

Fig 3.3 shows the pull-down menu of File Menu, which has the same functions as Sigma Editor. Please refer to the above Sigma Editor for more information about Communicate setting and Send to sign.

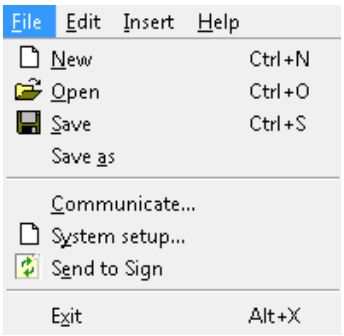


Fig. 3.3 File Menu

3.1.2 Edit Menu

Fig 3.4 is the pull-down menu of Edit Menu. Since it is simple, it is quite easy to understand.

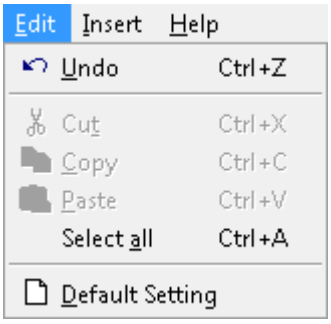


Fig. 3.4 Edit Menu

3.1.3 Insert Menu

The Insert Menu has only one function--inserting pictures to edit area. The picture format it supports are: BMP、JPG、JPEG and ICO. You can pull the pictures randomly to change their sizes.

3.1.4 Help Menu

The Help Menu has only the version information about True Font Editor. See Fig 3.5.

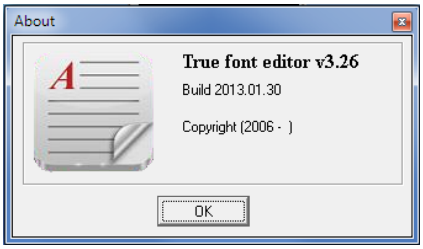


Fig. 3.5 Version information about True Font Editor

3.2 Tool Bar

Tool Bar of True Font Editor can be divided into file tool, color tool, alignment tool and other tools. All the tools in True Font Editor have almost the same function as those in Sigma Editor except that True Font Editor doesn't have frame back-ground color and the button of headline choice.

Color tools:

: Foreground colors of characters

: Background color of characters

Other tools:

: Sending button, the same as Sigma Editor

: Font choosing tool, as in Fig. 3.6, supporting fonts in the PC system

: Simulating button, the same as Sigma Editor

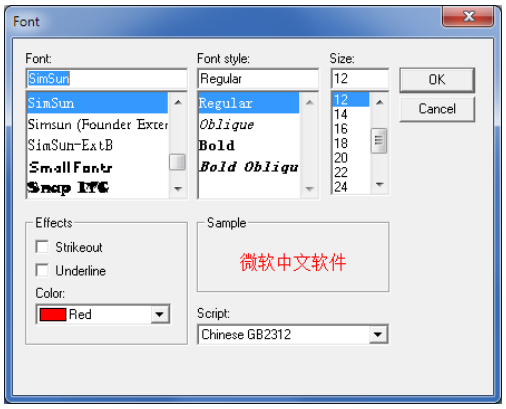


Fig. 3.6 Font choosing

3.3 Mode Bar

From Fig. 3.7 we can dee that the setting modes and their related functions are the same as sigma editor's, which include in mode, out mode, speed, pause and line spacing. The only difference lies in display time.

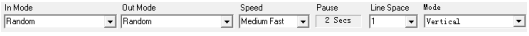


Fig. 3.7 Mode Bar

3.4 Editing Area

Different from Sigma Editor, True Font Editor doesn't regulate the boundary line to separate the editing information frame. In the area, lines can be changed automatically, same as table editing in Word. See Fig 3.8, if the words ***technology*** doesn't enter lines automatically, then there will come several letters following behind ***Chain.*** Thus, sue to the automatic line changing, there will come space of each line.

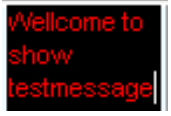


Fig 3.8 Automatic line changing

3.5 Status Bar

`Line: 1 Col: 1` : The location of the cursor, in which line and which column

`Modified` : In the status of editing information

`Panel Width:128 Panel Height:64` : Size of Panel, width:128, height:64.

Chapter 4Font Manager

As Fig 4.1 Shows, press Tool and then Font Manager to open the Font Manager software.

Fig 4.2 is the interface of Font List Bar, 4---Shortcut Button. The following is their detailed functions.

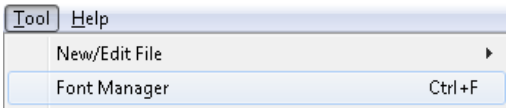


Fig. 4.1 Select Font Manager

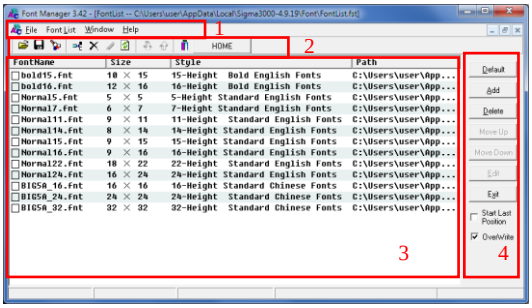


Fig. 4.2 Font Manager Interface

4.1 Menu Bar

4.1.1 File Menu

Fig 4.3 illustrates the pull-down menu of File Menu. We will focus on some special functions.

New Font: It means a customized font based on user's special need and preference. Fig 4.4 is the interface of establishing new font. Set the height and width of the font you want, and then choose the saving path, you can create your own fonts now.

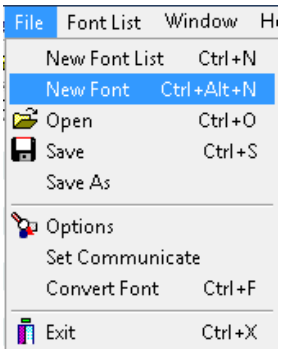


Fig 4.3 File Menu

Suppose you want a font of 10dots height and 7 dots width, just input the related information, choose saving path, and press button "OK". Fig 4.5 is the interface of customized font.

Fig 4.5 is the interface of customized font.

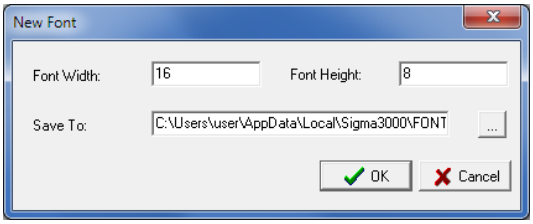


Fig 4.4 New font interface

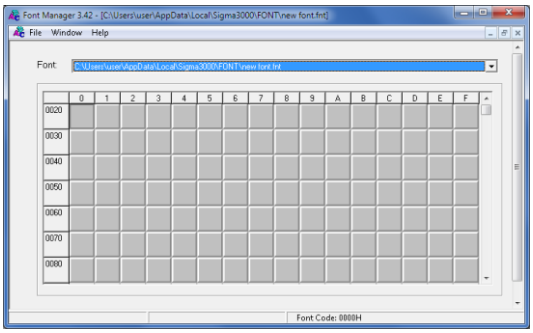


Fig 4.5 Interface of customized font

There is a ruler of line and column in Fig 4.5. Actually it is the ASCII location of each font you are creating. So the fonts should be established in accordance with ASCII principle, otherwise you won't get what you want through the input on the keyboard. In ASCII code, the big letter A is at 0041(hexadecimal), so we can make a big letter A just at this place. Double click the place of 0041, there will appear an editing interface like Fig 4.6.

From Fig 4.6 we learn that the editing area is made up of 5 parts, 1--- Menu Bar, 2---Tool Bar, 3---Character Information, 4---System Font, 5---Font Editing Area.

Notes:

Menu Bar, Tool Bar are bonded together with the Font Manager, only partial functions belong to this edit interface.

Area 3 shows the character information: font—10*7, ASCII code—0041H (H represents Hexadecimal)

System font means users can create any fonts on the base of the current fonts in the computer system. Press button OK after choosing a kind of font and you can download the system font into the font editing area.

Font editing area: Click the left key of the mouse, the block will turn to black, and click the right key, the block turns to white.

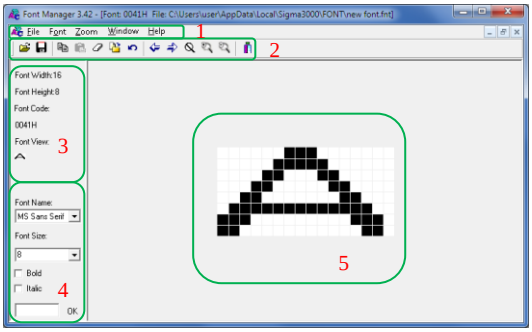


Fig 4.6 Font editing interface

After editing your own font, you should save it and then exit.

Communication setting: Consult the counterpart in Chapter 2 Sigma Editor.

Font Conversion: The function of this tool is to convert the font to be a FNT format one in Font Manager which can be downloaded to the display. See Fig

4.7, the converting interface. Choose a fixed font and size you want to change, and set the saving path and the font size you want, press Convert button, then you can realize this function.

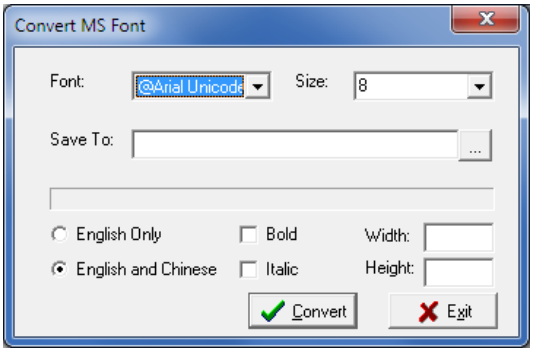
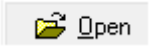


Fig. 4.7 Font Style

For example：

Suppose we want to switch to Arial Font 16. We will open the font conversion dialogue as shown in Fig 4.7. We select a font and size, and then a path to save the file. Then we select a language. Finally, we press the button

and we will see the progress bar changing, and the button

changes to 

. The conversion is completed and you will see Figure 4.8, with the font file name being Arial16.FNT. You can add it to the font library and send it to the LED screen.

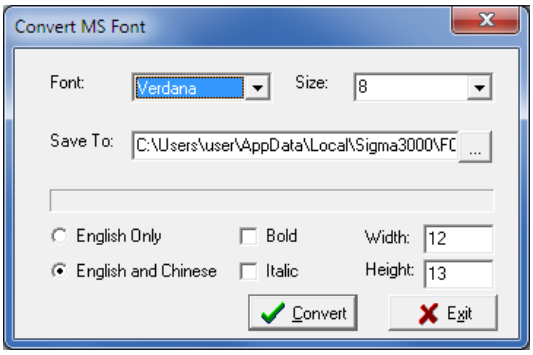


Figure 4.8 Conversion completed

4.1.2 Font List Menu

See Fig. 4.9, the pull down menu of font list menu, we will introduce the functions and meanings.

Add: Add new font to the font list.

Delete: Delete font from the font list.

Edit: Edit the font in the font list.

Move Up: Move the chosen font up.

Move Down: Move the chosen font down.

Update Font List: Send the font list to the display.

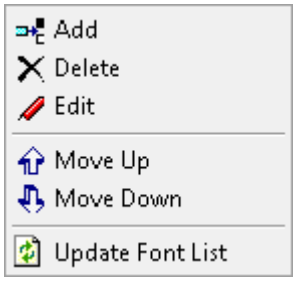


Fig. 4.9 Font List Menu

4.1.3 Window Menu

As Fig 4.10 shows, in the window menu, there are three functions: tile,cascade, and arrange icons. The following is the window converting bar of the open font list. The current chosen item is the first font list.

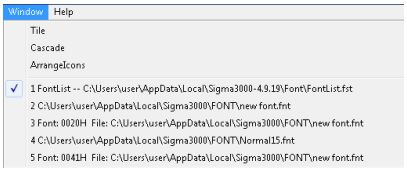


Fig. 4.10 Window Menu

4.1.4 Help Menu

As Fig $.11 Shows, The Help menu mainly gives the version information of font Manager.

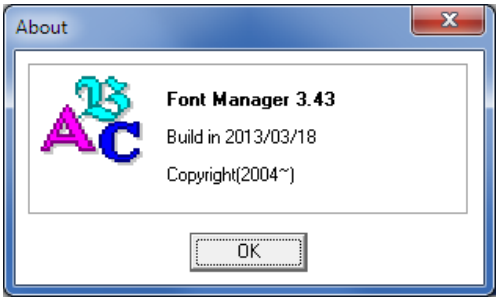


Fig 4.11 About Font Manager

4.2 Tool Bar

The buttons here are the same as the ones in Menu Bar.

: Open the font list file.

: Save the font list.

: Add the font to the font list.

: Edit the font in the font list.

: Examine the font in the font list.

: Update the font list to the display.

: Move down the chosen font.

: Move up the chosen font.

: Exit from the Font Manager.

4.3 Font List Bar

Font list area shows the fonts users have added. If you want to send some fonts to the display, you need to add those fonts to the list. There is a right key menu of the font list bar. See Fig 4.12. The function is the same as those pull down menu of the main menu. Suppose we want to send the font file Normal5-40 to the LED screen. We first add Normal5.fnt~Normal40.fnt to the font library. Then we click and we will see a communication interface. We select a mode that is workable for the LED screen, press the button OK, and we will see the progress bar moving towards 100%. If the data is sent, we will see the figures 4.13 and 4.14.

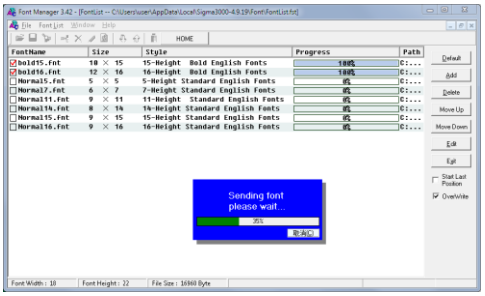


Figure 4.13 Font libraries being sent.

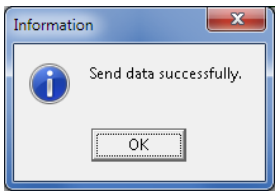


Figure 4.14 Data sent successfully

4.4 Shortcut Button

It is the repetition of the font list pull down menu. Being placed at the right side, users can use it quickly. Please consult the counterpart in the previous parts.

Chapter 5 Tools of Sigma Software

In the first chapter we have divided the Sigma Software interface to four parts, Menu Bar, Shortcut Panel, Work Station and Play Controller. We will focus on Menu Bar's function in this chapter.

5.1 File Menu

Fig 5.1 shows the pull down menu list of Sigma Play File Menu.

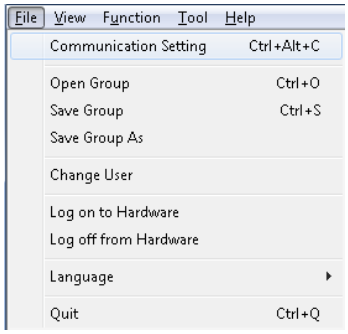


Fig. 5.1 File Menu

5.1.1Communication Setting

Fig 5.2 is communication setting interface which is the same as the counterpart in chapter 2 in function except a quick connection function.

Press the expansion button to open the connection displays. These items are searched in the Net Manager. Only those displays that can be searched in the Net Manager can be connected quickly. As Fig 5.3 shows, there are three displays to be chosen from the connection list. Choose any one and you can realize the communication with it.

If the display is found by Ethernet in Net Manage, then the display will be connected by network when connecting rapidly. If it is found by serial port, then it will be connected via serial port.

When connecting quickly, the related information about the display will be recorded automatically.

So once the GGUU or IP address or other correlated information about the communication changes, the seeking have to be executed once again. Or the quick connection will fail.

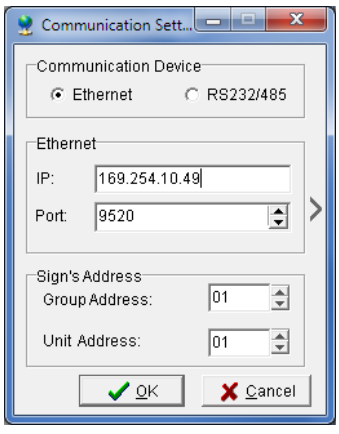


Fig. 5.2 Communication Setting

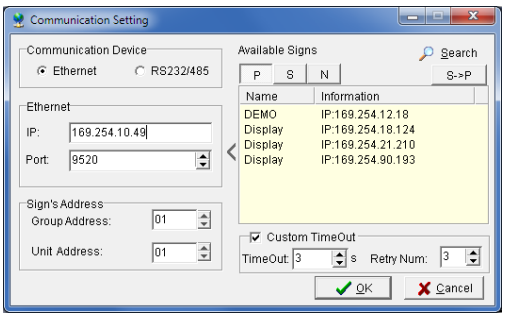


Fig. 5.3 Quick Connection Setting

5.1.2 Operation of Play List

Open “File Manage” interface in Sigma and click “File” on the Tools Bar, then users can see three options: “Open, Save and Save As”. These options aim at saving group list, for example, save the current group list as a new group and click “OK”. Users can Open the new group list by clicking “Open”.

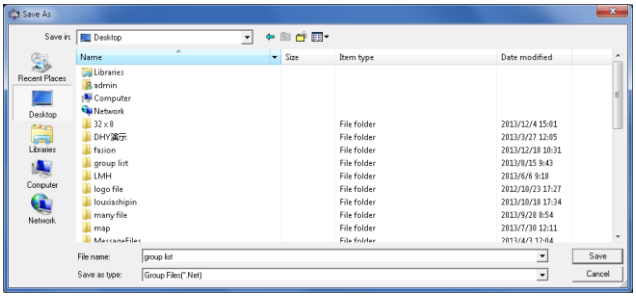


Fig 5.4 Save As Group

Note: Only after choosing a play list can you save the list and file in a package.

5.1.3 Change user

Fig 5.5 is the login interface from which you can change login users. The following table shows the login way.

5.5 Login interface

user level	User name	password
administrator	admin	admin
normal user	user	user

5.1.4 Log on to Hardware

The login hardware mainly includes log on to hardware and logout. The function can be set in the ***System Set*** panel. Once set, you have to choose *Login on to Hardware* to communicate with the display hardware. In this way, you can avoid the parameter changing by unprofessional persons or some illegal operations.

Fig 5.6 illustrates the login interface. After entering in "O1a59g". Press OK, and the login is successful. See Fig 5.7. The method of changing firmware's password is in Tool→advanced options, and you can find the changing password item.

Fig 5.6 Login on to hardware

Fig 5.7 Login successfully

5.1.5 Others Operations

The last two items about the file menu is language and exit. Only seven languages such as English, Chinese and German are available.

5.2 Function Menu

Fig 5.8 is the pull-down menu of function menu. We will divide them to several parts and introduce them one by one.

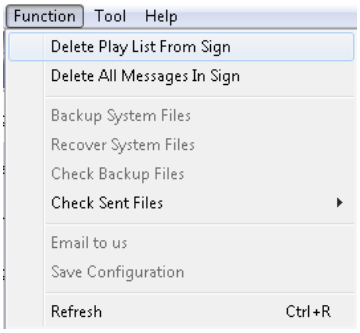


Fig. 5.8 Function Menu

5.2.1 Function of Backup/Recover

The two items of the second separate line are Backup System Files and Recover System Files. As shown in Fig 5.9, the indication window will appear when you choose to back up system files, click Yes and it starts. In Fig5.10.The major files that can be backed up are FPGA files, configuration information, r files and palette files and so on.

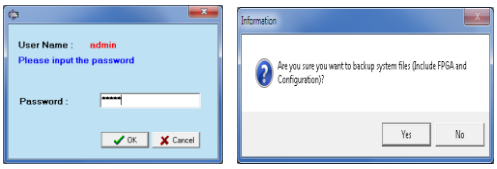


Fig. 5.9 Backup System File indication

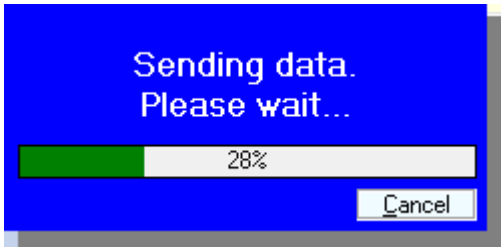


Fig. 5.10 Back up the system file

See Fig 5.13, when choosing Recover System Files, the indication window will appear, and then you click **Yes** to start recovering system files. In fact, the current CPU program has already backed up configuration files, Gamma files and palette

files, so that formatting Disk C will not erase system files, and the only thing you need to do is refresh FPGA program.

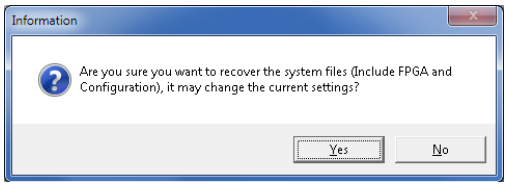
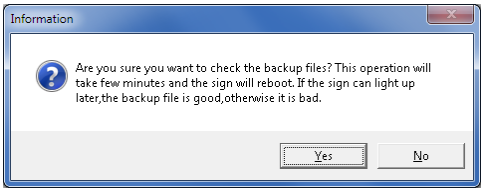

Information
Are you sure you want to recover the system files (Include FPGA and Configuration), it may change the current settings?
Yes
No

Fig. 5.11 Recovering system files

5.2.2 Check Backup Files

To check backup files, firstly, you need to type in the user password, secondly, press "yes" in the checking confirmation window, then start to check backup files.


Information
Are you sure you want to check the backup files? This operation will take few minutes and the sign will reboot. If the sign can light up later,the backup file is good,otherwise it is bad.
Yes
No

5.2.3 Check Sent Files

Check the files when sending lists to only one LED display: Choose "yes" in " check sent file", the system will check if the size of the NMG file is fit with the size of the LED display during sending the file to the display, if it is not fit with the display, the system will ask send or not send, and the system will read back the size of the LED display when you open the editor.

Check the files when sending lists to multiple LED displays: choose "no" in "Ignore file with not match sign", the system will check if the size of the NMG file is fit with the size of the LED display during sending the file to the display, if it is not fit with the display, the system will ask send or not send, as fig 5.12

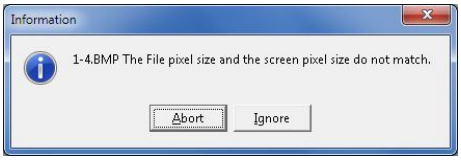


Fig 5.12 Send notes

5.2.4 Other Functions

The last three functions in this menu shall be explained as Other Functions.

The first of them is sending e-mail; this function enables the customers to send us email about configuration information and system information of the sign. Both this function and the next can be available only in the ***System Set*** panel. Then, the user just needs to choose sending e-mail, and click **Yes** in the following window.

Fig. 5.13 Indication window of sending e-mail to us

With this function, we can get to know if there are problems with the system set at customers' end, or whether the system information is right or not, so that we can help customers correct the mistakes. The Email is to be sent to our Supports' mail box. More Email settings can be done in Tool Advanced Option E-Mail Setting. Customers can choose the sender and the receiver of the E-Mail according to their need. When all is set, the only thing left is to click OK, as shown in Fig 5.14.

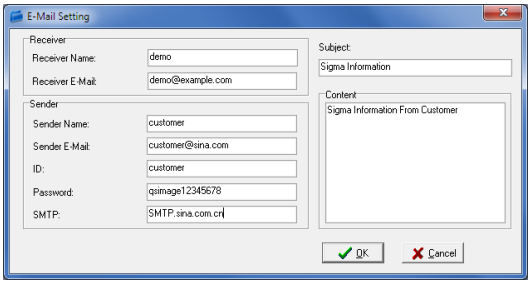


Fig. 5.14 E-Mail Setting

Next is to Save System Information. What is saved by this function is the information the E-mail has sent. As shown in Fig 5.15, the path in the first blank is to save the picture of the system set interface, the path in the

second blank is to save the text file of system set information.

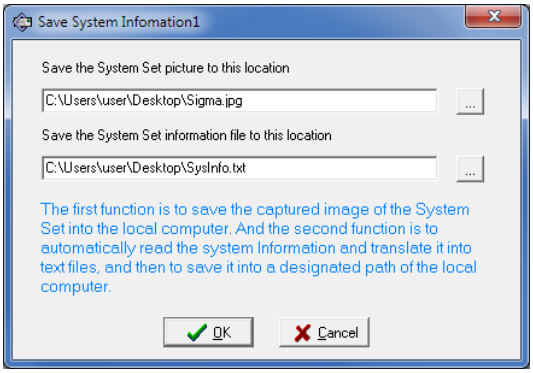

Save System Infomation1
Save the System Set picture to this location
C:\Users\user\Desktop\Sigma.jpg
Save the System Set information file to this location
C:\Users\user\Desktop\SysInfo.txt
The first function is to save the captured image of the System Set into the local computer. And the second function is to automatically read the system Information and translate it into text files, and then to save it into a designated path of the local computer.
OK
Cancel

Fig. 5.15 Save System Information

Click OK, and the following window as Fig.5.16 will appear when the saving finishes.

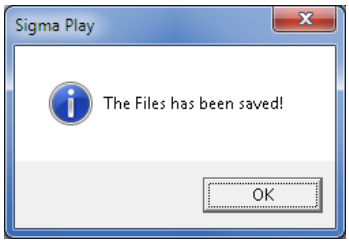


Fig. 5.16 Saving finishes

As shown in Fig.5.17, it is the image of Sigma.jpg saved above.

Fig. 5.17 An image of Sigma.jpg

As shown in Fig.5.18, it is the interface of SysInfo.txe saved above.

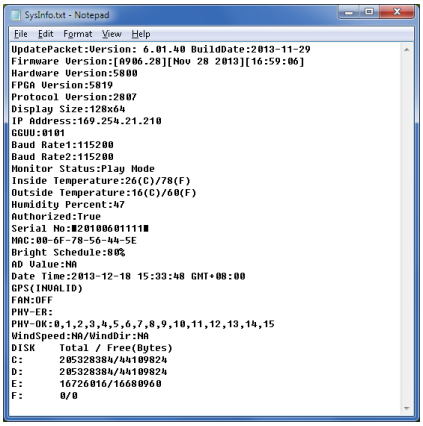


Fig. 5.18 A grabbed image from SysInfo.txt

And the last function is Refreshing content. It is designed to send the information in the current shortcut panel to the sign. This function equals to Send Configuration, Send List Files, etc., but it is not available in Net Manage. Don’t use this function in Net Manage.

5.3 Tool Menu

The Figure 5.19 is a pull-down menu of Tool menu. Edit File and Font Manager have been introduced in detail in previous Chapters, and please refer to the previous explanation.

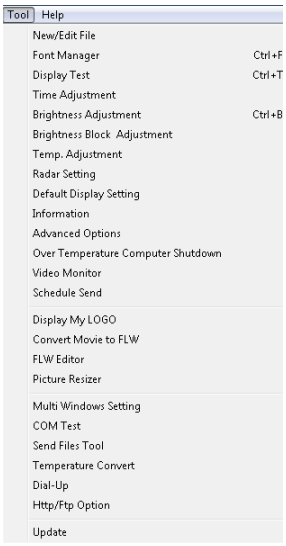


Fig 5.19 Tool Menu

5.3.1 Display Test

Display Test is a special tool for screen test. It has test of single color full-on, scan test and test of gradual change of gray degree in single color. These tests can check if the sign is working abnormally or has flashing pixels.

As shown in Fig 5.20, Display Test is consisted of two parts, the left is General Test and the right is Gray Test. These tests are carried out in the status of off-line, thus they are invalid in VGA screen. As for the Gray Test, you can input any number from 1 to 256 into Gray Scale, and there are two styles available, they are Color and Gradual Change. Color means the sign will be in only one color you choose, and its brightness is decided by gray degree. And Gradual Change means a static process of changing from bright gradually to less bright.

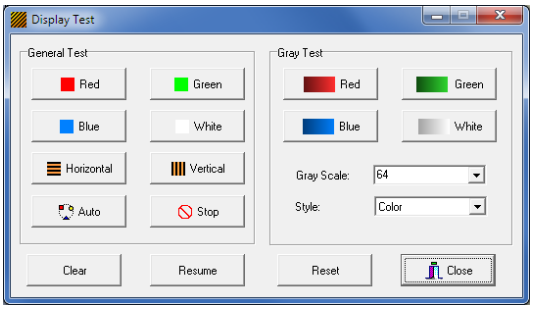


Fig. 5.20 Display Test

5.3.2 Time Adjustment

Fig 5.21 is an interface for Time Adjustment. As for the time in sign, we sometimes have to adjust it to make it synchronized with the time in computer. Because there are different time zones, and user should choose a right time zone before adjusting the time.

This tool supports time adjustment of main board and slave board, i.e. if these two boards are linked; only an adjustment to the main board will make the time in slave board adjusted too.

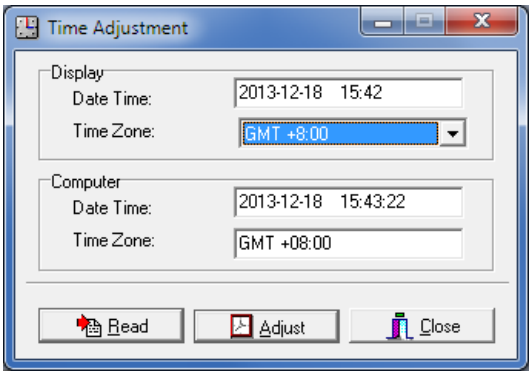


Fig. 5.21 Time Adjustment

5.3.3Brightness Adjustment

Fig 5.22 is an interface for Brightness Adjustment. This tool enables you to set the brightness of a small unit block so that you can have the white balance of a sign coordinated. Detailed operations as following: first of all, select 4*8 blocks, you can select one block at a time, or many blocks by means that indicated in the state bar below. Then, in the right panel, you can set the value of brightness by clicking up or down buttons, and also you can input numbers in to RGB blocks. When everything is set, you just click Set to send the value of brightness to the sign.

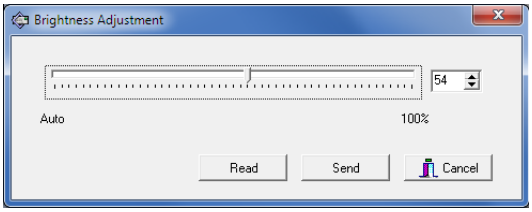


Fig. 5.22 Brightness Adjustment

5.3.4 Temp. Adjustment

As shown in Fig 5.23, Temperature Adjustment can adjust the temperature of exterior temperature sensor of LED sign, and you can adjust the temperature in Celsius or Fahrenheit degree.

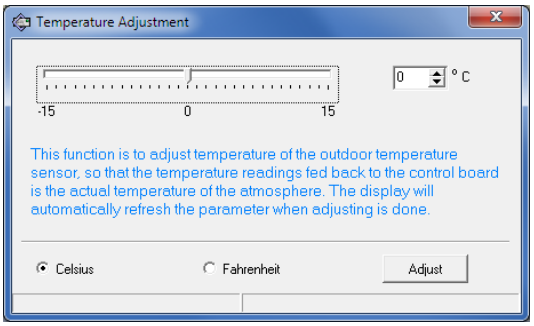

Temperature Adjustment
-15
0
15
° C
This function is to adjust temperature of the outdoor temperature sensor, so that the temperature readings fed back to the control board is the actual temperature of the atmosphere. The display will automatically refresh the parameter when adjusting is done.
Celsius
Fahrenheit
Adjust

Fig.5.23 Temp. Adjustment

5.3.5 Module Brightness Setting

Fig 5.24 is an interface of Module Brightness Setting. Users only need to select the area that need to adjust, as the green area in the picture, to modify the parameters of RGB. In Fig 5.24, each parameter of R, G, B is 63.

Note: This function is only applied to QS5246 at present.

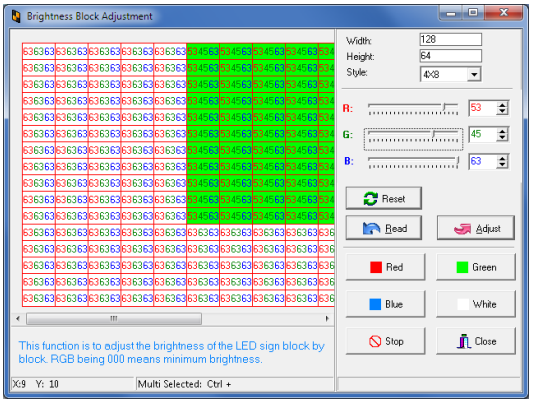


Fig 5.24 Module Brightness Setting

5.3.6 Radar Setting

Radar Setting: Limitation of speed and deviation value are available through this setting.

Note: This function is only applied to QS5271.

5.3.7 Default Display Setting

Fig 5.25 is an interface of Default Display Setting. This tool is valid only to string command, but not to files edited by Sigma Editor. This tool is different from the Default Setting in Sigma Editor.

For example, after setting Default Display Setting, we send JetFile II command file to the sign. The command is <0x01>Z00<0x02>AA<0x06>Welcome<0x04>, a simple JetFile II command. When it is sent successfully, the sign will display *Welcome*, which is displayed in accordance with the Default Display Setting. This means that *Welcome* has a black Background Color, red Text Color, and it is saved in Folder T of Disk D, its Default Font is Normal 7,In Mode and Out Mode Random, Speed Medium Fast, Pause time on the sign 3 seconds, Hor Justification Center and so on. If you change the Default Display Setting, the outcome of *Welcome* will change accordingly. For example, if you set Default Font as Normal 14, *Welcome* will be displayed in Normal 14.

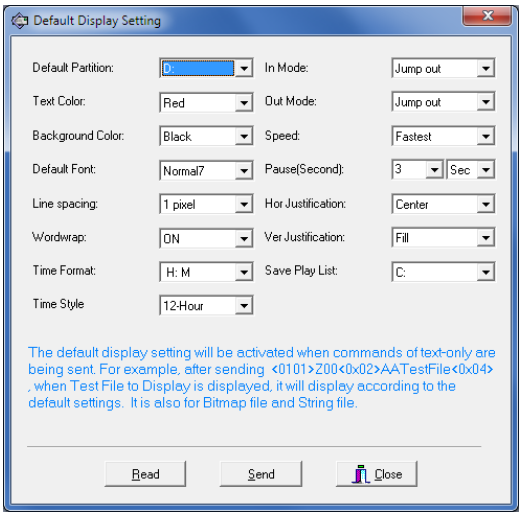


Fig. 5.25 Default Display Setting

Default Disk: default saving path is Disk D;
Text Color: default color of text file is Red;
Background Color: default background color of text file is Black;
Default Font: default font of text file is Normal 7;

Line spacing: default line space is 1 pixel.
Word-wrap : default value is ON
Time Format: to set default time format. H: M means when time value is less than10, 0 will not be displayed before the value; while HH: MM means 0 will be displayed when time value is less than 10.
In Mode: default In Mode is Random.
Out Mode: default Out Model is Random.
Speed: default Speed is Fast.
Pause: default Pause time is 3 seconds.
Hor Justification: default horizontal justification is Center
Ver Justification: default vertical justification is to Fill.
Save Play List: to set default Disk for saving Play List, and the default Disk is Disk C.

5.3.8 Information

There are five kinds of information in Information List, they are System Information, Disk Information, Play Log, System Log and Update Log.

① System Information

As shown in Fig 5.26, what is taken down is the information of the control board QS5006 of the sign, and you can educe the information as a txt file.

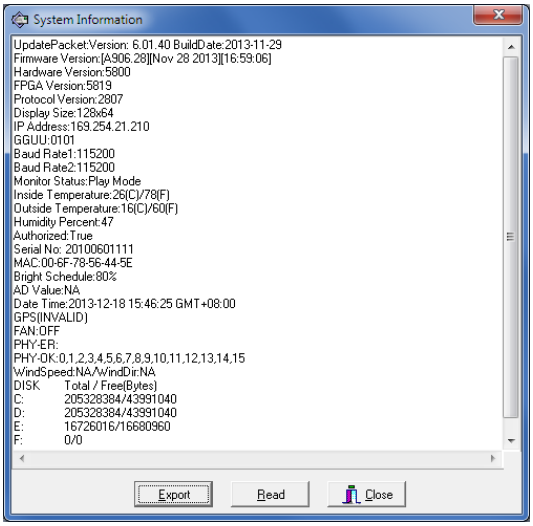


Fig. 5.26 System Information

② Pixel Detection Report

Pixel detection report is used to check the detection result of the LED display, as fig 5.27

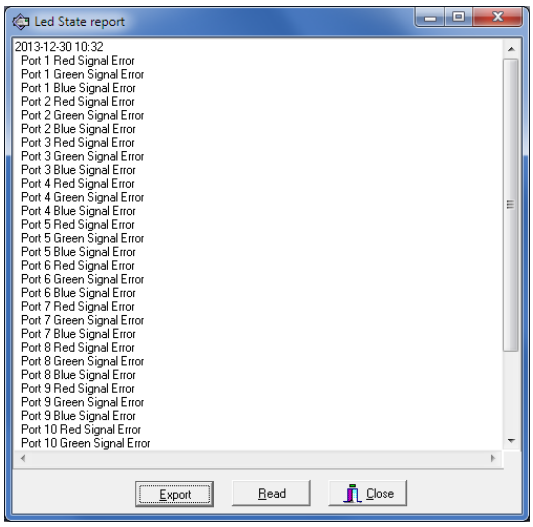

Led State report
2013-12-30 10:32
Port 1 Red Signal Error
Port 1 Green Signal Error
Port 1 Blue Signal Error
Port 2 Red Signal Error
Port 2 Green Signal Error
Port 2 Blue Signal Error
Port 3 Red Signal Error
Port 3 Green Signal Error
Port 3 Blue Signal Error
Port 4 Red Signal Error
Port 4 Green Signal Error
Port 4 Blue Signal Error
Port 5 Red Signal Error
Port 5 Green Signal Error
Port 5 Blue Signal Error
Port 6 Red Signal Error
Port 6 Green Signal Error
Port 6 Blue Signal Error
Port 7 Red Signal Error
Port 7 Green Signal Error
Port 7 Blue Signal Error
Port 8 Red Signal Error
Port 8 Green Signal Error
Port 8 Blue Signal Error
Port 9 Red Signal Error
Port 9 Green Signal Error
Port 9 Blue Signal Error
Port 10 Red Signal Error
Port 10 Green Signal Error
Export
Read
Close

Fig 5.27 Pixel Detection Report

③ Disk Information

As shown in Fig 5.28, it is specialized in reading the size of system Disk, and it can format the partitions. After clicking Format, an indication window will appear (as in Fig5.29), then click Yes to format Disk C.

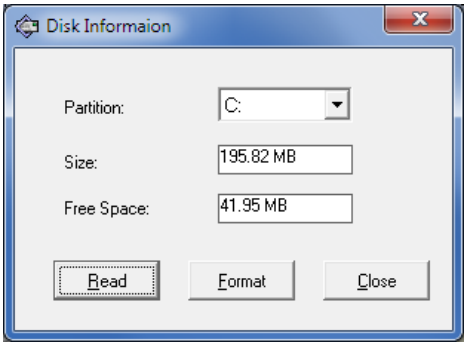


Fig. 5.28 Disk Information

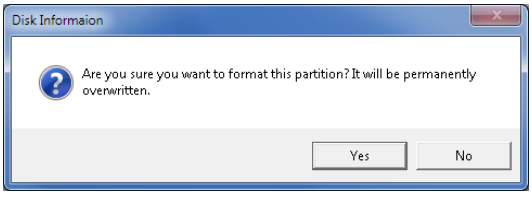


Fig. 5.29 Indication for formatting

Note: Disk C is a System Disk, FPGA program will be lost after Disk C is formatted, but other information is backed up. If font library is saved in Disk C, it will also be lost.

④ Play Log

Fig 5.30 is an interface of Play Log. In this Play Log, there is serial Number marking the Play Files. The number ranges from 0 to 65536, and if the number of files are more than 65536, the beginning files will be deleted automatically. There is Time Period to record time period of display files, and the unit of Time Period is 1 hour. The path and file name of display files are recorded. The length of File Name should be no more than 8 characters, and is recorded with 8.3 principle. This Play Log records the times and period (total amount of display time) of displaying.

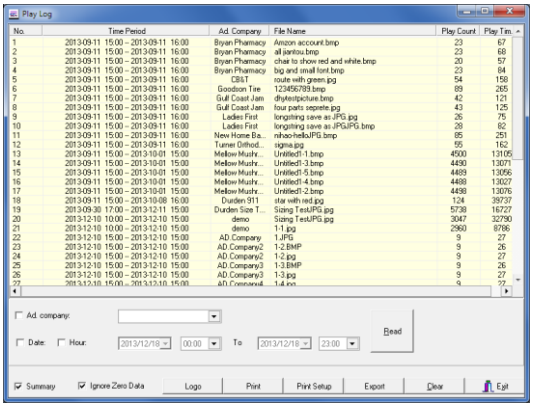


Fig. 5.30 Play Log

⑤ System Log

As shown in Fig 5.31, System Log records the main operation of the system. It reflects the working status of the control card of a sign.

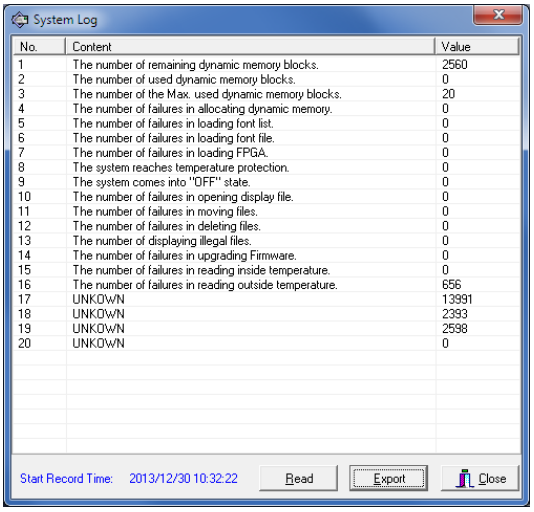

System Log
No.
Content
Value
1 The number of remaining dynamic memory blocks. 2560
2 The number of used dynamic memory blocks. 0
3 The number of the Max. used dynamic memory blocks. 20
4 The number of failures in allocating dynamic memory. 0
5 The number of failures in loading font list. 0
6 The number of failures in loading font file. 0
7 The number of failures in loading FPGA. 0
8 The system reaches temperature protection. 0
9 The system comes into "OFF" state. 0
10 The number of failures in opening display file. 0
11 The number of failures in moving files. 0
12 The number of failures in deleting files. 0
13 The number of displaying illegal files. 0
14 The number of failures in upgrading Firmware. 0
15 The number of failures in reading inside temperature. 0
16 The number of failures in reading outside temperature. 656
17 UNKOWN 13991
18 UNKOWN 2393
19 UNKOWN 2598
20 UNKOWN 0
Start Record Time: 2013/12/30 10:32:22
Read
Export
Close

Fig. 5.31 System Log

⑥ Update Log

Fig5.32 is a grabbed image of Update Log. It records the information, time and updated communication method of FPGA and CPU files.

```
UPDATE END**************************************************

UPDATE FPGA*************************************************
2007-07-02 14:16:02
Display Name: DISPLAY
IP: 169.254.10.53
Group Address: 01    Unit Address: 01
Communication Error!
UPDATE END**************************************************

UPDATE FPGA*************************************************
2007-07-02 16:18:07
Display Name: DISPLAY
IP: 169.254.10.160
Group Address: 01    Unit Address: 01
Sent successfully!
UPDATE END**************************************************
```

Fig. 5.32 Update Log

Example: the above UPDATE FPGA recorded the update time is 2007-07-02 16:18:07, the update figure is FPGA, the display name is DISPLAY, the IP address after update is 169.254.10.160, GGUU is 0101, result: sent successfully.

5.3.9 Advanced Options

There are four options in Advanced Options, they are User Management, Change Hardware Password, Get Hardware Password and E-mail Setting.

① User Management

The function of this option is to manage the users logging in to Sigma. Fig5.33 is an interface of User Management.

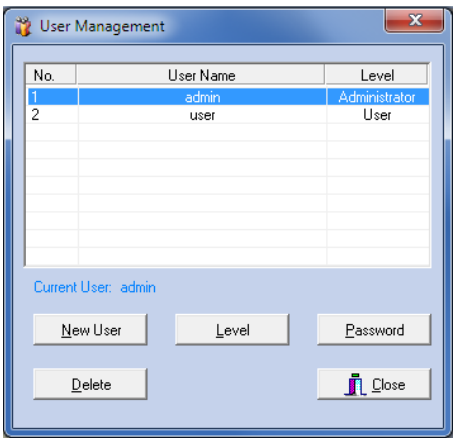


Fig. 5.33 User management

②Change Hardware Password

As Fig. 5.34 shows, input old password into Old Password(the default old password is O1a59g or MSYQYJ), then input the new one into the blanks of New Password and Repeat Password, and then the old password can be changed.

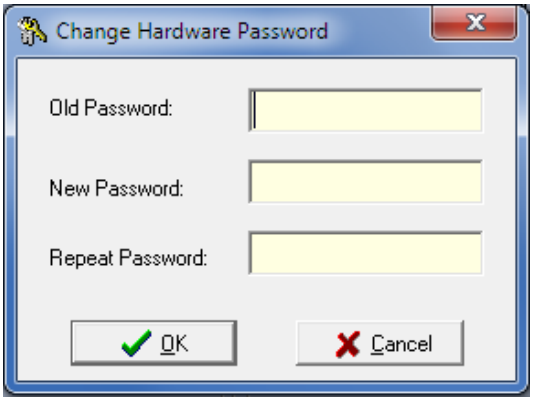


Fig. 5.34 Change Hardware Password

③Get Hardware Password

As Fig. 5.35 shows, open the window of Get Hardware Password; firstly choose the path of the file which has saved password data.

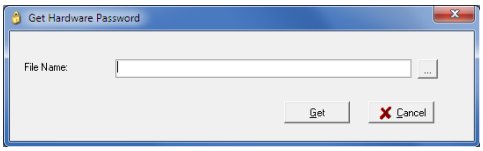


Fig 5.35 Get Hardware Password

As Fig. 5.35 shows, after choosing the path, click “Get”, and then turn off the power of the Display Control Board immediately. Turn on the power and wait for the opening information of the display.

Note: Because the data of the password is given during the process of turning on the Display, so we should get the data at the beginning of boot-strap.

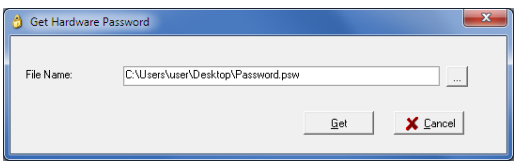
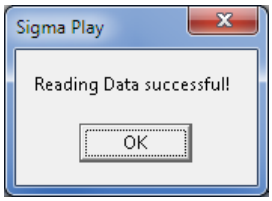


Fig. 5.36 Choose the saving path of file

Reading data is successful.



Reading Data successful

After successfully get the password data, users cannot see the passwords, the data should be sent back to our company and decoded by our engineers, then the password can be got finally. Therefore, in case to prevent any unnecessary trouble, users have to remember the password after setting it.

④E-Mail Setting

As Fig. 5.37 shows, it is the interface of E-mail Setting. We have mentioned how to use this interface before (Fig. 5.14). Here we would like to repeat it.

In this setting, the default receiver is our company after-sale service mail box. If users want to change it to be their own mail address, they can do it here. The default sender is our company. Users can modify it to be their own sending address (if there is something wrong when sending email).

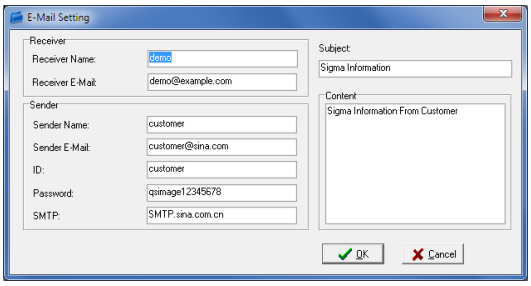


Fig. 5.37 E-Mail Setting Interface

5.3.10 Video Monitor

Picture 5.37 is the interface of Video Monitor, please insert an IP adds of network camera in the address bar, then will see a frame of that camera.

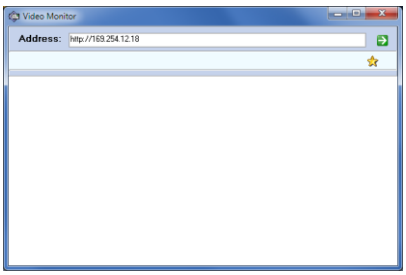
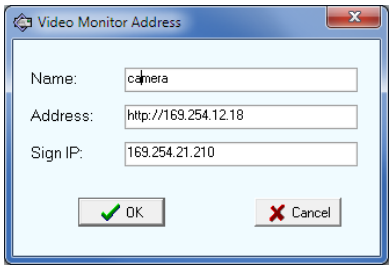
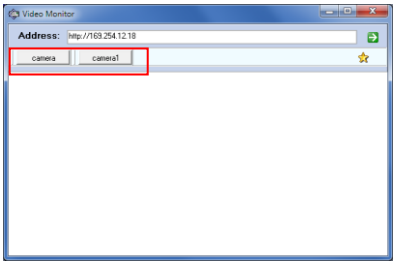


Fig 5.37

Check in , to add a Monitor clipper key of the sign, can add more .

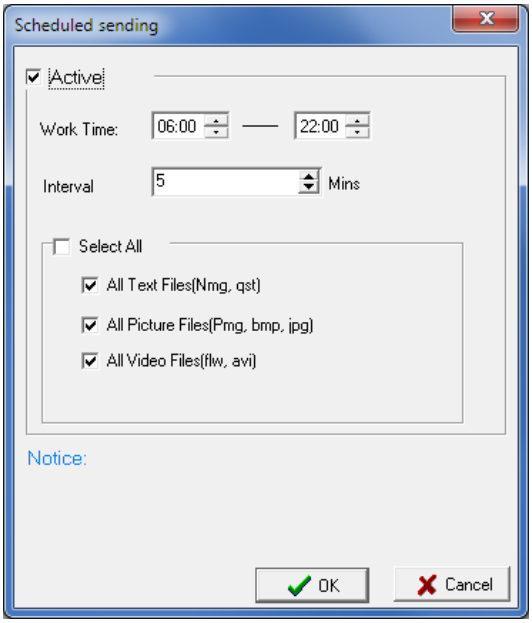


Name: shown the name of sign(can be any number or letters)
Address: IP address of network camera.
Sign IP: IP address of LED sign.



5.3.11 Schedule Send

This setting is mainly for the regular update of RSS. Set up the file in the File List and activate it. Then schedule the sending time of working hours, frequency and the form of files that need to send.



5.3.12 Display My Logo

As Fig. 5.38 shows, it is the setting interface of “Display My Logo”. There are functions of setting position, size and display modes of the Logo.

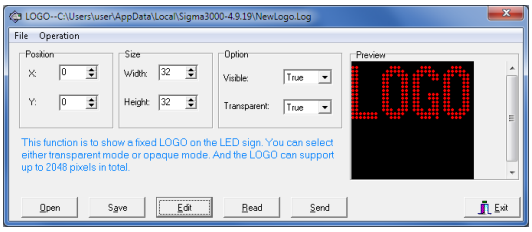


Fig. 5.38 LOGO Setting Interface

Position is for setting the Logo with the left corner to be the coordinate. Size is for setting width and Height of the Logo. There are two options--visible and transparent. Under Transparent, the Logo will flow on the characters of the Display.

Open: Open the edited Logo files;

Save: Save the current Logo files;

Edit: As Fig. 5.39 shows, click “Edit” and you will open Logo Editor, the function of which is similar with Sigma Editor. It is simplified version of Sigma

Editor. For more details please refer to Chapter 2.

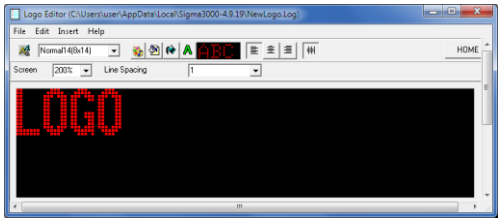


Fig. 5.39 Logo Editor Interface

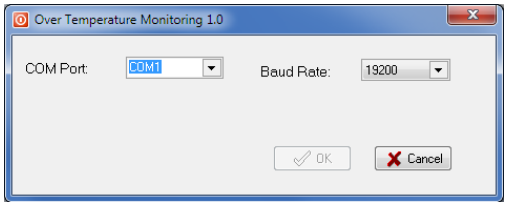
Read : Read the Logo files of the Display;

Send : Send the current Logo files to the Display.

5.3.13 over temperature computer shutdown

This software can be off the computer when the internal temperature of the sign over70℃.

When using QS5202, please check in “over temperature computer shutdown” and open “over temperature monitoring”, connecting the COM of the QS5202 with the COM of the computer, then can be communicated .



An icon will be appeared at the lower right corner when set up successful.

5.3.14 Convert Movie to FLW

If you want to display an animation file in the offline mode, you will need this tool to convert the file into the FLW so that the LED screen can display. The current software version supports converting AVI, SWF, GIF, ASF, WMV, MPG, MPEG, MP4, 3GP, MOV, QT, RM or RMVB files into FLW format files.

The Figure 5.40 shows an interface of a video file converted into the FLW mode. ① is the animation file preview window; ②is the modification or setting window; ③is the animation file conversion and simulator display window; ④is the animation file conversion ratio setting window; ⑤is the animation size setting window; ⑥is the animation file output window; ⑦is the animation addition window. Functions and methods of use are explained as follow.

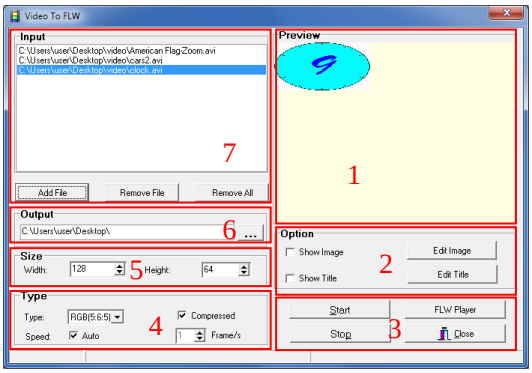


Figure 5.40 Video to FLW conversion interface

①Preview window: We can preview added animation files and FLW files.

②Modification window: Here we can set an image and title. These settings are for optimizing FLW files.

First let’s look at the location for editing a picture or image. In the window, the coordinates X and Y represent the location picture or image in the FLW window as related to the upper left corner. Width and Height represent the size of the picture or image. If you like to, you can also tick Show Image and click Edit Image. There you can

opt to choose placing the picture in the foreground of the FLW animation file. Finally, you need to select a path for saving the picture file.

Now let's set the title. The first line is "Character for title" and "Font and size for title". The second line is color of characters. The third line is font setting. And then there is title font editing area.

③Animation file conversion and simulator display: Here to begin and stop conversion, to simulate display, and to close the window.

④Conversion ratio setting window: The default setting is for width and height be to identical with those of the LED screen. We can change these value settings to play FLW animation files in our preferred way.

Selections	Descriptions
Width/Height	Can be changed. FLW animation files can be generated according to the width and height.
Mode	For single color animation, select 1:1. For 256 color animation files, select 8:8. For 16 bit color animation files, select 5:6:5. For 24 bit color animation, select 8:8:8. Selecting a proper mode can help save file storage size, speed up data transmission speed and achieve ideal display effect.
Preview window	Enlarge preview window
Speed(frame/sec)	You can use the default speed for normal use
Compress	If you compress a picture, the display quality will be degraded. If you do not compress a picture, the FLW file size may be too large.

⑥Animation file output window: This is where you save the converted file.

⑦Window for adding animation files: This is where you add the animation file which you want to add.

5.3.15 FLW Editor

Figure 5.41 shows a video editing window. You can edit a video file which is in the FLW format.

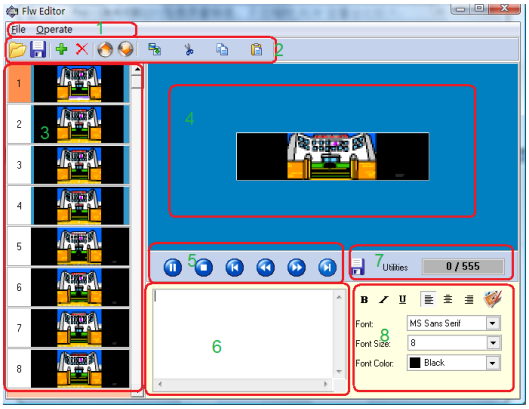


Figure 5.41

1) Menu Bar:
File Menu
Open: To open a video file;
Save: To save a video file;
Exit: To exit the system;
Operate Menu:
Add: To add a frame;
Insert: To insert a frame;
Delete: To delete a frame;

1) Icon Bar:

: To open a video file;

: To save a video file;

: To add a frame;

: To delete a frame;

: Move up;

: Move down;

: To insert a frame;

: Cut;

: Copy;

: Paste;

2) Video upload area

When the video file is added, it will be uploaded in the sequence of one frame after another.

3) Preview area

When a video file is being edited or played, a corresponding picture is displayed in the preview area.

4) Video control area

It can be used to control the play and stop of a video file.

5) Character editing area.

If users want to add characters to the video pictures, you can type characters in the editing area. Users can see the typed characters in the preview area.

6) Saving characters.

:Save the edited characters in the current frame.

: Save the selected frame. See Figure 5.42;

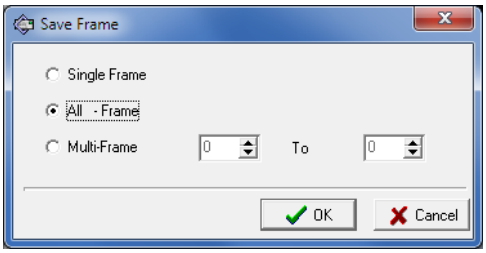


Figure 5.42

: Current frame/Total frames.

7） Character font area

: Bold

: Slanting

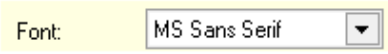
: Underline;

: Align to left

: Align to middle

: Align to right

: Frame editing



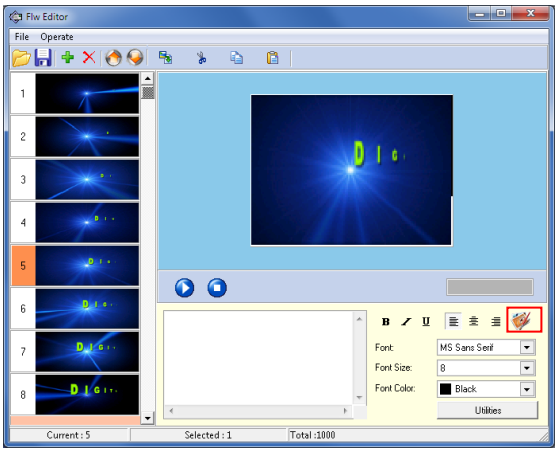
: Font;

: Font size;

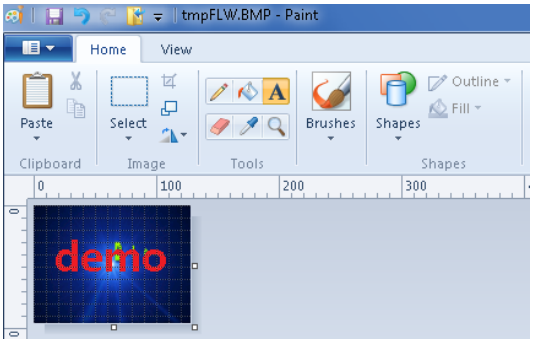
: Font color;

8）Animation editing

Select a frame

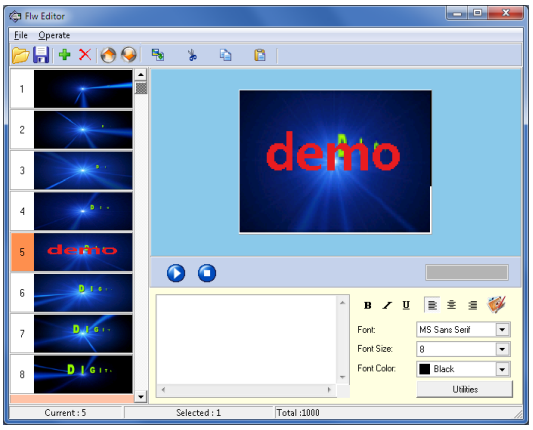


Now you will see the following picture. You can edit the animation frame in the window.



Now please save it.

Completed!



5.3.16 Picture Resizer

Picture Resizer is to convert the picture of any size to BMP picture in a designated size.

Fig.5.43 is the interface of Picture Resizer.

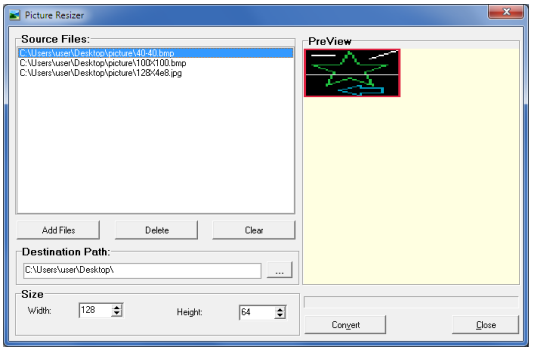


Fig. 5.43 Interface of Picture Resizer

Step 1: Add picture file, the valid formats are BMP, JPG, JPEG, GIF, ICO, EMF, and WMF;

Step 2: Choose the saving path of the converted file;

Step 3: Set the width and height of the designated picture;

Step 4: Click button "Convert" and the converting will start. In Fig.5.41, the indication window appears when the converting finishes.

Fig. 5.44 The converting finishes

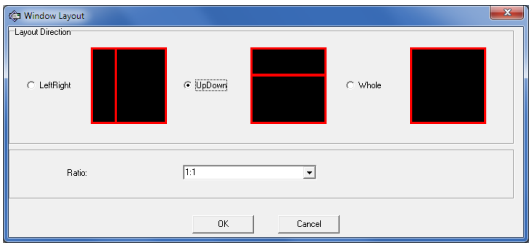
5.3.17 MultiWindows Set

This function is for windows allocation and to display the content in different windows. (It is only support control board QS5800.) For example: divide the screen into 2 parts by 1:2:

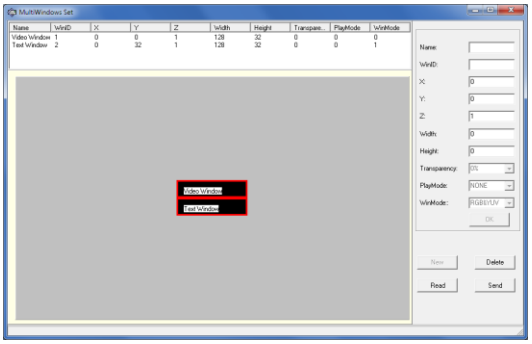
Step 1: Click "Read" to read back current window settings;

Step 2: Click "Delete" to delete current window;

Step 3: Click "New", choose Up/Down and Ratio 1:2 on the popup page, and click OK.



Step 4: As in following picture, there are two windows in 1:2. Click "Send" to send the setting.



When the setting is done, video window and text window work separately. Video window

can display all types of files while text window can display files but video.

5.3.18 COM TEST

COM TEST is to test whether the com port communication of the local computers are normal or not.

Fig.5.45 is the interface of COM TEST.

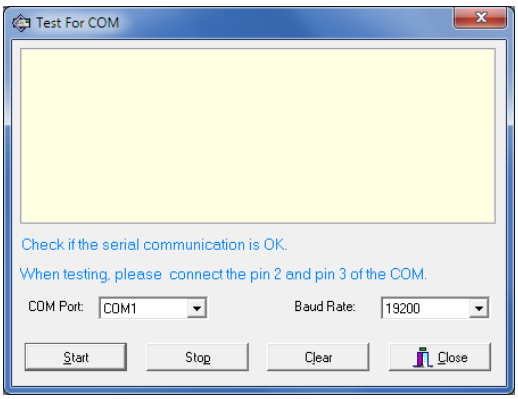


Fig. 5.45 Tool for Com Port test

According to the indication of the interface, when testing, please connect the Pin2 and Pin3 of the COM, and click Start. Then COM 1 will be tested. User can test other serial ports by choosing other COM ports in the column “COM Port”.

In Fig.5.46，if it shows Communication OK, it means the com port of the local computer is no problem.

Otherwise, if it shows Request time out like Fig.5.47，there is some problem with the serial port of the local computer.

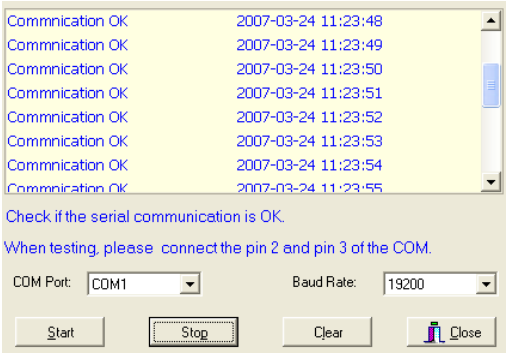


Fig. 5.46 Communication OK

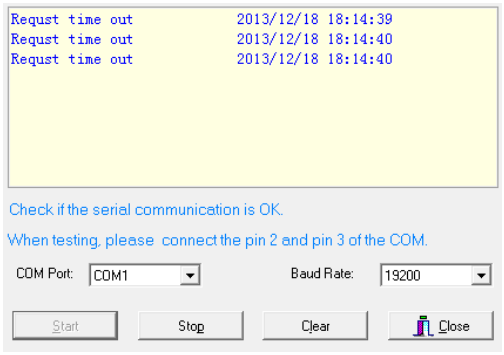

Requst time out 2013/12/18 18:14:39
Requst time out 2013/12/18 18:14:40
Requst time out 2013/12/18 18:14:40
Check if the serial communication is OK.
When testing, please connect the pin 2 and pin 3 of the COM.
COM Port: COM1
Baud Rate: 19200
Start
Stop
Clear
Close

Fig. 5.47Communication fail

5.3.19 Send Files Tool

The function of Send Files Tool is to send the designated file to the appointed sign in a certain time period.

Fig.5.48 is the interface of Send Files. We will introduce how to make the setting of sending files at a certain time period.

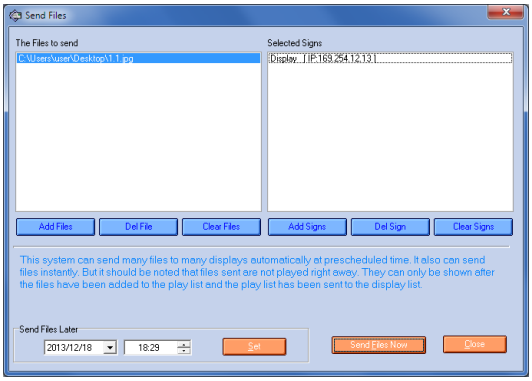


Fig. 5.48 Interface of Send Files (1)

Step 1: Click Add Files , add the appointed files to “The Files to send”, these files can be in the format of NMG, PMG, BMP, JPG and JPEG etc..

Step 2: Click Add Signs , add the designated LED sign to “Selected Signs”;

As Fig.5.49 shows, click >> in the window of Choose Signs, then all the signs on the left will be added to the right column, then click OK.

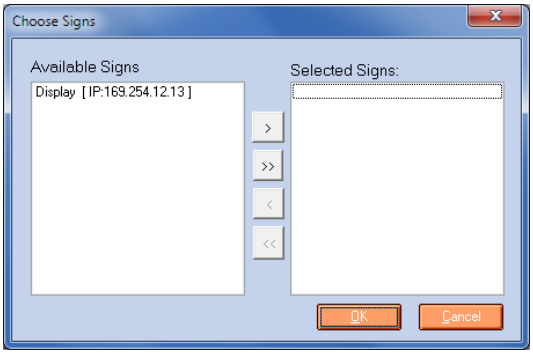


Fig. 5.49 Choose Signs

When the user finishes adding files and choosing signs, the window in Fig.5.50 will appear.

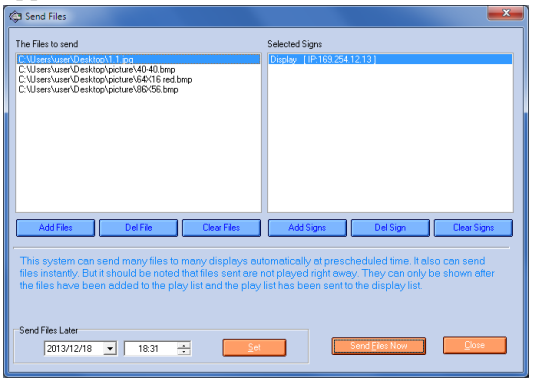


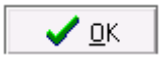
Fig. 5.50 Interface of Send Files (2)

Step 3: Set the time of sending and click

, then a clock icon will appear in the taskbar of the computer like Fig.5.51. It is counting down and when it goes to the pre-scheduled time, the files will be sent.

Fig. 5.51 Down-counter for sending files

Note: when it is counting down to send the files, Sigma software cannot be closed, otherwise the count-down clock will disappear immediately. The computer cannot be turned off either. After the file is sent to the designated sign, it will not be displayed right away because there is no File list in the files which have been sent. The LED sign will only display File List. Then we need to do the following to make the files displayable.

Step 4: Display the designated file which has been sent. Open the Sigma software, enter List Manage as shown in Fig.5.52，and click , then the Play List Files like Fig.5.53 appears, choose “Add Files From Sign”, and another window like Fig.5.54 will appear. In this window, user can choose the designated files to display. The files ticked are added into the File Display List. After choosing display files, click 

, then we can see the added files in Play List Files as shown in Fig.5.55. At last, click

, the Play list will be sent to the LED sign, then the LED sign will display these files.

Fig. 5.52 List Manage

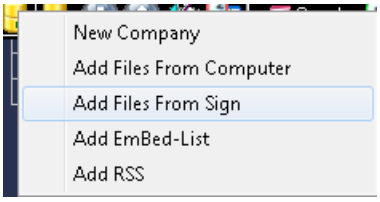


Fig. 5.53 Add List

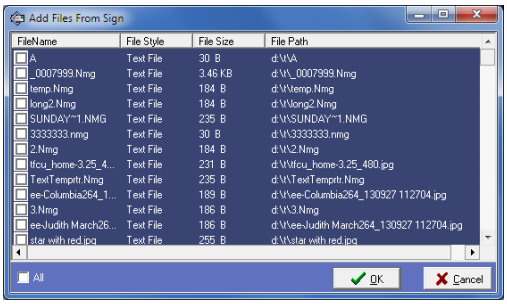
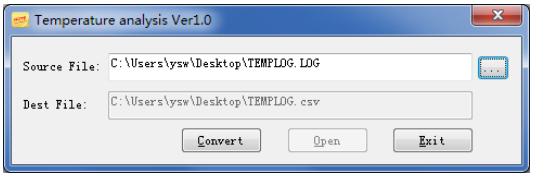


Fig. 5.54 Add List File

Fig. 5.55 Play List Files

5.3.20Temperature Convert

The function of Temperature Convert is to convert the temperature log files into .cvs files.



Choose temperature log file read back from the control board in "Source File", press Convert button to convert the file. A window will come out for reminding after the coonversion as the below fig.

A .cvs file will be created in the source file once the conversion is finished. Press Open can open the target file, and the file can be open by source file path.

5.3.21 Dial-up

Dial-Up provides users a communication channel through telephone, then long distance communication is realized. It is useful for the users in the areas where internet is not available.

Fig.5.56 is the interface of Dial-Up, telephone number, communication Com Port of the local computer, and the communication Baud Rate of the LED sign's Com Port.

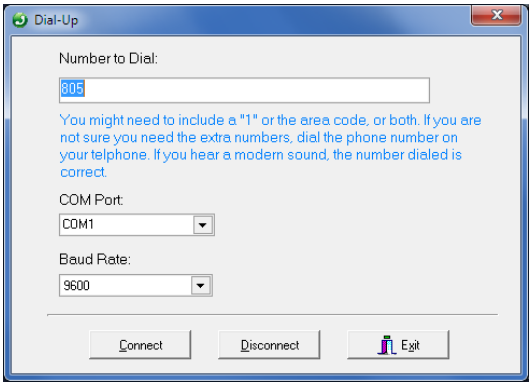

Dial-Up
Number to Dial:
805
You might need to include a "1" or the area code, or both. If you are not sure you need the extra numbers, dial the phone number on your telphone. If you hear a modem sound, the number dialed is correct.
COM Port:
COM1
Baud Rate:
9600
Connect
Disconnect
Exit

Fig. 5.56 Dial-Up

To realize Dial-Up connection, Modem and the required communication cables are needed. Please see Fig. 5.57 for the connection diagram.

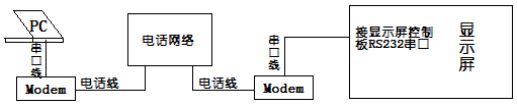


Fig. 5.57 Connection diagram of Dial-Up

Click Connect and Dial-Up connection begins. When the connection is successful, we can use that channel to communicate with the sign. Since we use COM1 for the connection, we choose COM1 for the communication with the sign as shown in Fig. 5.58.

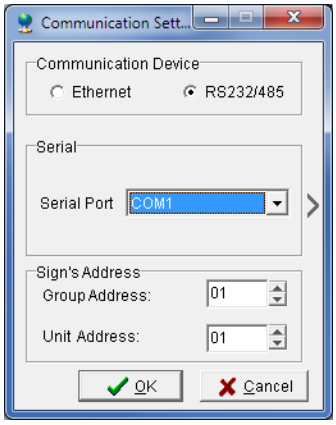


Fig. 5.58 Choose COM1 for Communication

5.3.21 Update

There are 5 tools in Update, they are CPU Update, FPGA Update, Palette Update, Create Update Package and Update Wizard. These tools are used to update the sign, and only the Administrator can do the operation.

① CPU Update

We use this function when we need to update the CPU of the sign. Fig.5.59 is the interface of CPU Update. Only the files with cpu as suffix can be updated. Click the button Send and the update begins. After the update finishes, please wait for about 1 minute. Then turn off the sign and reboot it, the CUP has been updated to the control card of the sign.

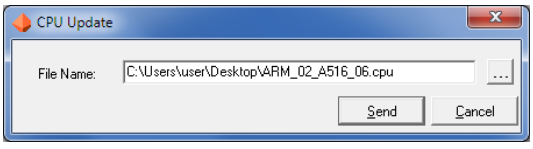


Fig. 5.59 CPU Update

②FPGA Update

When updating FPGA, user must choose the FPGA program which is suited with the LED sign. Otherwise, the sign will display randomly or display nothing, the worst situation is the control card may be burnt. Fig.5.60 is the interface of FPGA Update. Only the files with PGA as the suffix can be updated, click Send and the update begins.

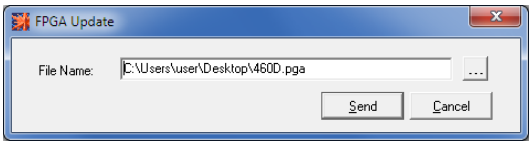


Fig. 5.60 FPGA Update

③Palette Update

Pallet Update is to send the palette to the sign. Palette may lose because of some unsuitable operation to the sign, as a result, some colors cannot be shown on the sign. Then we need to send the pallet to the sign. Fig. 5.61 is the interface of Palette Update. It is seldom that the Palette would lose and palette is included in CPU, so Palette Update will be used only in special case.

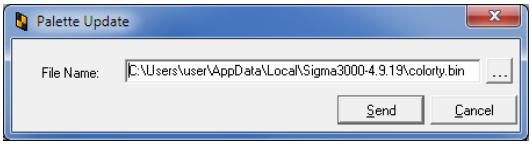


Fig. 5.61 Palette Update

④Create Update Package

Create Update Package is to combine CPU file, FPGA file, Palette file and Gamma file together and make an Update Package. Fig.5.62 is the interface of Create Update Package; users can choose files according to their needs to make the package. Please tick the files needed and click OK.

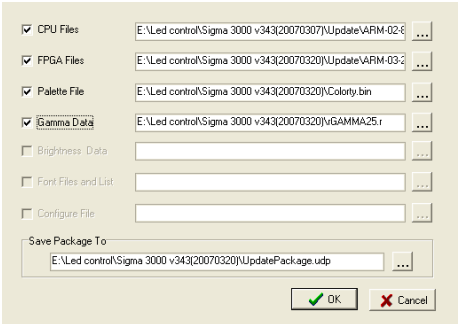


Fig. 5.62 Create Update Package

Suggestion: the update package is used only for updating the system from all aspects. Otherwise, it is not suggested to update with package since the efficiency of updating with package is low, what’s more,

palette and Gamma files are already included in CPU.

⑤Update Wizard

Please see Fig.5.63, Update Wizard is to update the package above. Please choose the correct communication device and address in the left columns, the right column will show the update files in the package. Click Update and it starts.

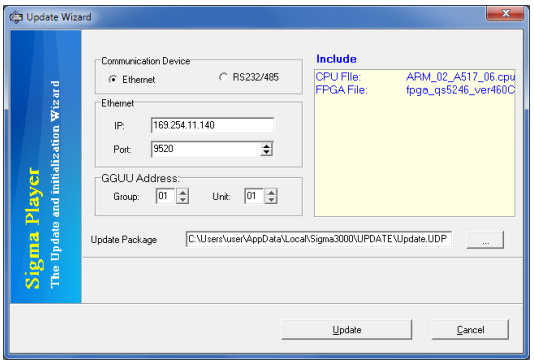


Fig. 5.63 Update Wizard

Fig.5.64 shows the update progress and the current updating CPU program.

the CPU update has finished, but we have to wait for the display to reset; now we can reset the display manually.

As shown in Fig.5.65, an indication window will appear after the display is reset, click Yes and the FPGA update begins.

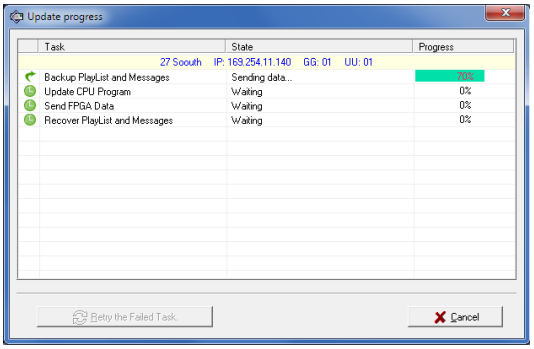


Fig. 5.64 Update Progress

Fig. 5.65 Resent the display and continue.

After the FPGA update finishes, another indication window like Fig.5.65 will appear, now we don't need to reset the display, click Yes and the update will continue.

As shown in Fig.5.66, all the update tasks are completed successfully.

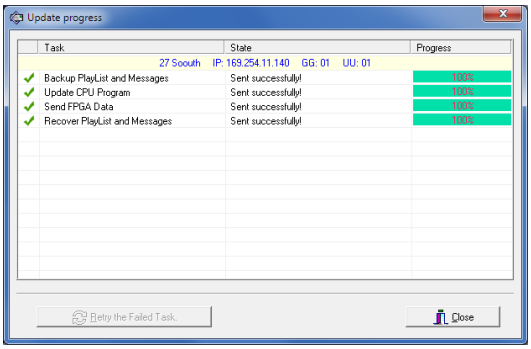


Fig. 5.66 Task completed

5.4 Help Menu

There are two options in the Help Menu. One is the edition information about Sigma software, and the other is this Manual.

As shown in Fig 5.67, this window is the edition information about Sigma software.

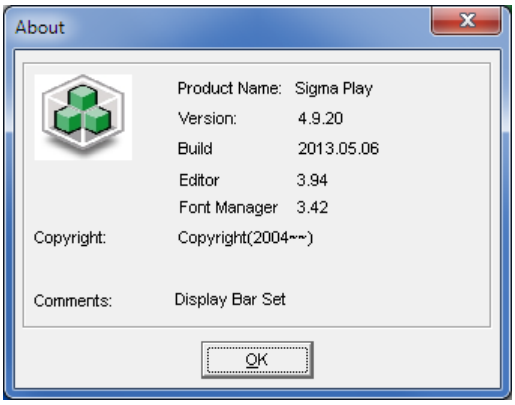


Fig. 5.67 About

Chapter 6 Shortcut Panel of Sigma Software

The shortcut panel is an important part of the Sigma software, so it is necessary to explain the shortcut panel in detail as a chapter.

6.1 List Manage

List manage is a tool to manager play files and play lists. Using List Manage properly will be helpful to improve the sending efficiency of display files.

As shown in Fig 6.1, this is the interface of List Manage Panel. The left part is the management area of play list, and the right one is the management area of play files. List Manage (The LED display in operation is the LED display which is connected currently)

Fig. 6.1 List Manage Panel

: create play list;

: open the files in the play list;

: save play list, if you choose the playing list, the system will ask you that you want to save in "my play list" or save in the computer;

: delete play list;

重命名: rename play list;

读取: Read back the play list in the LED display;

: add the display file, can add from computer or from the LED display;

: delete the display file;

: move down the display file;

: move down the display file;

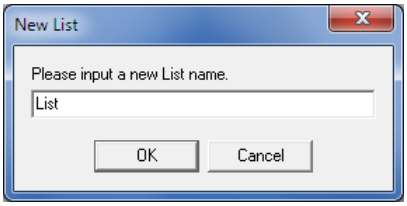
: edit the display file, if the NMG file is chose, the sigma editor will be open and used to edit, if the PMG is chose, the true font editor will be open and used to edit, if the BMP file is chose, the picture editor of Windows will be open and used to edit;

: switch to the file schedule interface;

发送: send display file and its play list immediately.

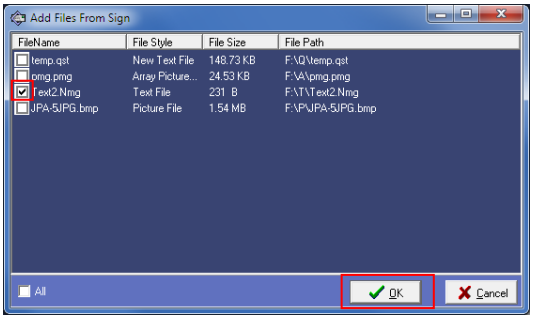
Here the function of List Manage will be explained by taking several examples:

Press to create play list and type in the list name in the popup dialog.



Choose the new list which was just added in the play list, press , add from the computer, add display files for the LED display, it will be as the below fig after adding the files.

Press if you want to add the file from LED display, choose add from sign, tick the file you want t add and press ok.



Press if you want to add the new advertisemet companies, choose new companies and type in the list name, choose play one file in one cycle or play all files in one cycle.

Then you can set file schedule. File schedule is a function to set the play time and make the file play as per the setting play time.

For example, set the play time of the first file as November 23th, 2013 to December 23th, 2014, from Monday to Friday, 8am to 8pm every day, as procedure is as below:

1. Delete the tick of

, set the date, tick the start date, choose the start date as November 23th, 2013, the end date December 23, 2013.

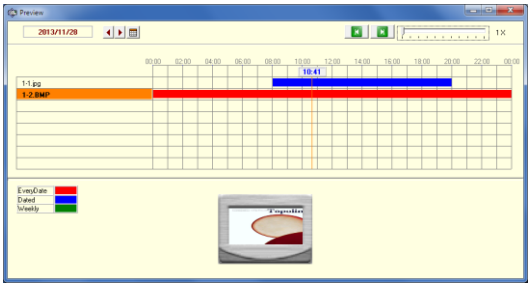
2. Set the time, tick the start time, choose the start time as 8am, end time is 8pm.

3. Set the week, delete the tick of the S and below the S.

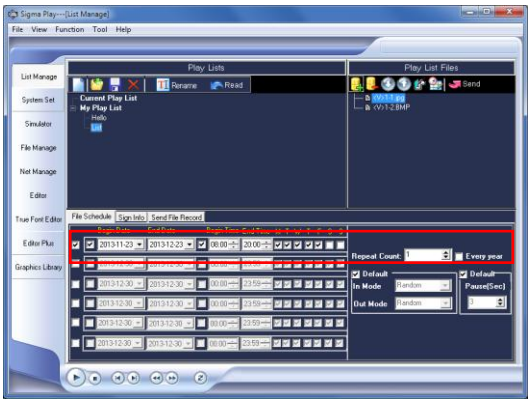
4. Set the play time of the file, use the same way to set the play time according to your schedule.

Instruction: if the play time of the file in the playlist is not set, the LED display will be always playing that file by default. Besides, please calibrate the time of the LED display to avoid play ahead of schedule, delay or not play.

Choose after setting the shedule information, you can check and simulate the operation aspects in every period.



The system will show 4 schedules normally, if more schedule is needed, please drag the cutting line upwards as the below fig. 6 schedule can be shown at most.



There are some setting items on the right side of the panel.

Those setting items aim at the picture files, they can set the in mode, out mode and the stay time of the picture. Tick default means use the default setting, delete the tick of the default if you don't want to use default setting and do the settings you want in below.

In Mode：How the picture appear, the function is the same as Editor,

Out Mode：How the picture disappear, the function is the same as Editor,

Pause：stay time, the unit is second.

Press

to send the list to the control board after the setting is done

Choose “playing” and press

if you want to read back the playlist of the LED display, read back the displaying file. Files in the LED display will be marked in yellow, local files will be marked in white, files not exist in the LED display and local will be marked in red.

Note: You can add 128 files at most in one play list. The control panel cannot play the list if files are more than 128.

6.2 System Set

Only the administrator can operate the function of sending in System Set. The common users can just read the configuration information, but can’t modify the configuration of the display.

As shown in Fig 6.2, it is the system configuration page of 5246 main board. In this panel, some characters in some columns are covered by light yellow color, which means that information can be read but can’t be modified.

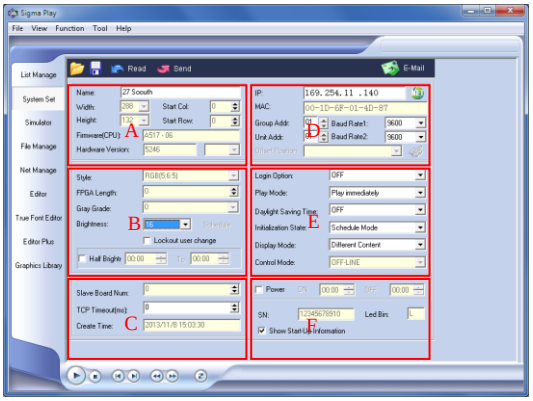


Fig. 6.2 Interface of System Set

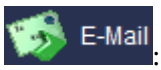
Firstly, let’s talk about the functions of the above buttons:

:To open the configuration file with the suffix of dat;

: To save the current setting;

: To read the configuration of the display;

: To send the current setting to the display;



: To send through E-mail, it is a shortcut for “Email” in the Function Bar.

The following explains in detail the functions and meanings of other items in the System Set.

A1. Name:

It shows the name of the display. And the name can be modified here.

A2. Width:

It shows the width of the display. The value is set in accordance to the width of the display.

A3. Height:

It shows the height of the display. The value is set in accordance to the height of the display screen.

A4. Start Col:

It is the setting for the Start Column of the display. The value of the Start Column of QS5006 main board is 2. And if the value is set to be 1, the first Column of the display will display abnormally (The first Column is counted from the right side). And the value of other main board is set according to the actual situation.

A5. Start Row:

It is the setting for the Start Row on the display. The value is 0 usually.

A6. Firmware(CPU):

It is used to read the CPU edition number of the display.

A7. Hardware Version:

It is used to read the hardware edition number of the display.

B1. Style:

It is the style options of the display. It is decided by the actual use of display. E.g. The RG bi-color indoor display can't be set as the 8:8:8 Style. The setting is in detail as the following table:

Style	Usage
1:1	For display with single color shade, it is used with QS0712 main board with 4000 FPGA program
8:8	For the RG bi-color display
5:6:5	For the outdoor full color display
8:8:8	For the outdoor full color display

B2. FPGA Length:

The calculation formula of FPGA Length as the following table:

display Mode Value	***8:8:8 4bytes***	***5:6:5 or 8:8 2bytes***	***1:1 2bits***
FPGA Length	>= Actual width of the screen/**4 + 2**	>= Actual width of the screen/**8 + 2**	>= Actual width of the screen/**16 + 2**

E.g.: the size of the display is 96*256, its value of FPGA Length is as the following table.

display Mode Value	***8:8:8 4bytes***	***5:6:5 or 8:8 2bytes***	***1:1 2bits***
FPGA Length	>= **256/4 + 2** That is >= **66**	>= **256/8 + 2** That is >= **34**	>= **256/16 + 2** That is >= **18**

B3. Gray Grade:

The setting relationship between Gray Grade and FPGA Length is as the following table:

Style	1:1	8:8	5:6:5	8:8:8
FPGA Length(L)	L> Width of the screen/16	L=Width of the screen/8+2,L minimum is 18	L=Width of the screen/4+2，L minimum is 34。	
Gray Grade	3076	2564	4872、6152、9744	

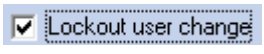
B4. Brightness:

It is the setting of the screen brightness. Auto is automatic brightness (it is only available for the screen equipped with a brightness sensor). 1～128 is the value for manual setting. This brightness setting here is different from the brightness adjustment in the Tool Bar. The brightness adjustment just adjusts the brightness roughly, and it will not affect the white balance of the screen. But brightness setting adjusts the brightness accurately and improves the white balance.

Administrator has the privilege to forbid normal users to adjust the brightness, see the select check box below.

B5. ☐ Lockout user change

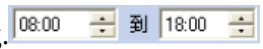
Using administrator rights can forbit the user to adjust the brightness, ticking the option "lockout user change" as the below fig. can forbit.



B6. ☐ Half Brightness

It is used to set the time period of half

brightness of the display screen.

E.g. 

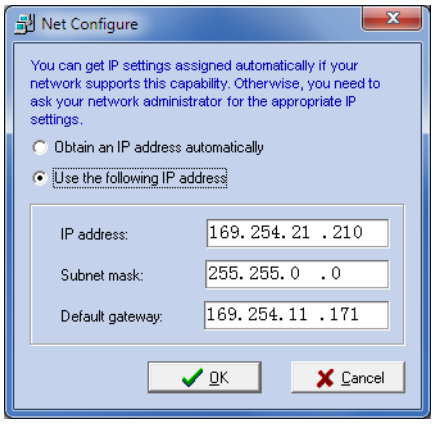
, it sets the duration of half brightness from 8:00 to 18:00.It means that the screen will start being in the half brightness status from 8:00 to 18:00.Then after that, the screen will be all bright.

D1. IP:

It is for changing the IP address of the screen, user can input the expected IP address here.

After the IP address, there is the icon

. You can click it to enter configure for network.


Net Configure
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address
IP address:
169. 254. 21 . 210
Subnet mask:
255. 255. 0 . 0
Default gateway:
169. 254. 11 . 171
OK
Cancel

If the local network supports automatic IP function, you can select “Obtain an IP address automatically”. Then an IP address will be assigned to every LED display on the net.

D2. MAC:

It is used for checking the MAC address of the display, but MAC address can’t be modified here. If this MAC address is changed, the setting being sent is invalid, and the read-back configuration information is still the former MAC address. There is another special tool to set the MAC address.

D3. Group Addr:

It is used to set the GG address of the display. The GG address is also called Com port group address.

D4. Unit Addr:

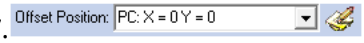
It is used to set the UU address of the display. The UU address is also called Com port unit address.

D5. Baud Rate1:

It is used to set the communication Baud rate of Com port 1 in the display.

D6. Baud Rate2:

It is used to set the communication Baud rate of Com port 2 in the display.

D7. 

You can modify it only under control mode.

gg. When entering.

E1. Login Option:

It is used to set whether it needs to login before communicating with the hardware. When this option is on, users have to login before communication.

E2. Play Mode:

There are two play modes: Immediate-play mode and Awaiting-play mode. When the display screen is playing a file and the user sends a new play file to the screen, for the Immediate-play mode, the playing file will be paused and the new one will be played; as for the Awaiting-play mode, the new one will not be played until the current file finishes.

E3. Daylight Saving Time:

It is used to set the summer time. When it is on, the time of screen will self-adjust according to the summer time, and when it is off, the time won’t adjust according to the summer time. The summer time adjustment will automatically add one more hour at zero o’clock on the morning of the second Sunday in March every year, then automatically reduce one hour at zero o’clock on the morning of the first Sunday in November every year.

E4. Initialization State:

There are three optional settings in the

initial status of the screen: .

Schedule mode: When the display is in this mode, the information displayed in the screen is played according to the file schedule. This is a default mode in the system.

Continuous display: It is the mode for displaying Ticker files.

Head-tail display: All files sent to the list of the screen are connected and played circularly without pause.

E5. Display Mode:

There are two options in this mode. One is displaying the same content, the other is displaying different content. Their usages are as the following table:

Display Mode	QS5006		QS0712
Number of the slave boards	Single control board	Different panels display the same content	Single control board
Same content	P1-P4P5-P8 P1-P4 same as P5-P8	Different panels display the same content	P1、P2 P1 port and P2 port display the same content
Different content	Play normally	Different panels display independently	P1、P2 P1 port and P2 port display independently

When connecting single panel, there are 4 option settings, single-side, double-side, triple-side and all round.

E6. Control Mode:

There are two options in this mode. One is VGA mode, the other is Off-line mode. Only QS0712 and QS5003 main board can support the VGA and Off-line modes. The default value of other main boards is Off-line mode.

C1. Slave Board Num:

It is used to set the number of the slave boards in the display. E.g. the main board is QS5006 and the maximum amount of the slave board is seven. And the connection of this hardware is as the following Fig 6.3.

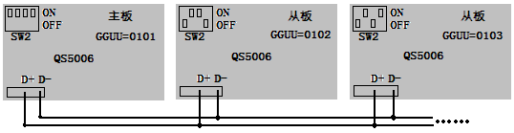


Fig. 6.3 The connection of the main and slave boards

C2. TCP Timeout:

It is used to control the communication connection of the display effectively. If the value of TCP Timeout is 3 seconds (equal to 3000 milliseconds), the communication chain between PC and the display screen is connected in this 3 seconds. If the time exceeds 3 seconds, the communication chain will be disconnected automatically. Then the chain should be reconnected before communicating with the screen. If the communication distance is far, it maybe takes a long time to reconnect the communication chain.

C3. Create Time:

It is used to read the written-in time of system parameter in the control board.

F1. Power

It is used to set the ON/OFF time of the display.

E.g. ON 08:00 OFF 18:00 , it means the sign will be on at 8:00 and will display files; and the sign will be off at 18:00, and the screen is black—display nothing..

Note: This switch is not the switch of the hardware. It is the operation on the software. The power supply of the screen is still on, the control board is still working.

F2. SN:

It is used to read the serial number of control board of the display.

F3. Led Bin:

It is used to define the style of display modules by the user. This bar only can be input one character which classifies the display modules. E.g. the user can input A to sort the display of 1/2 scanning into A class, input B to sort the screens of 1/4 scanning into B class, and so on. Therefore, the user can define the modules as he likes.

F4. Show Start-Up Information

It is used to set whether to show the start-up information. If it is ticked, it means that when the display is turned on every time, the start-up information will be shown..

6.3 Simulator

The simulator is for the users to preview the display files.

As is shown in the Fig 6.5, the Simulator supplies a window for previewing play files. Through it, the users can know the effect of the play files which will be sent to the display screen. This function supports the display simulation of NMG, PMG, BMP, ICO, JEG, JPEG, FLW, GIF, WMF and EMF files. The buttons as Fig 6.4 can control the play of the simulation. And at the same time if the screen is connected with Sigma, the buttons can simultaneously control the play status of the screen.

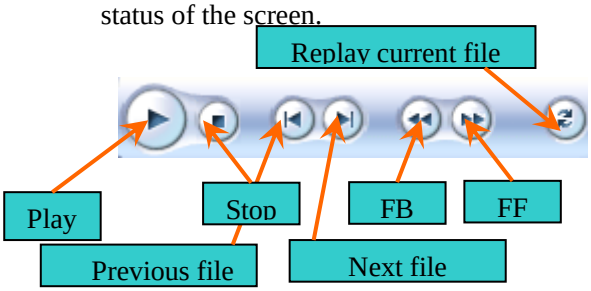


Fig. 6.4 Play Control Button

Fig. 6.5 Interface of Simulator

6.4 File Manage

File manage panel is used to manage the disks of control board of the display screen and the windows of the disks' system files

As is shown in Fig 6.8, it is the file manage interface. There are four disks C, D, E and F in the figures.

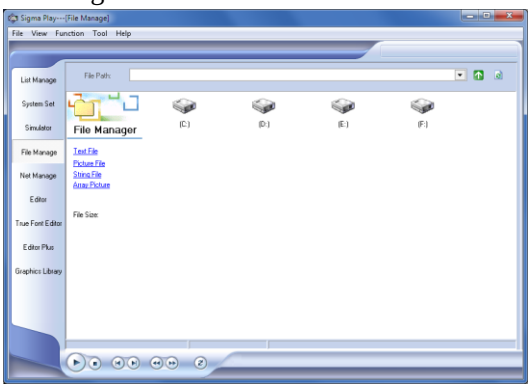


Fig. 6.8 Interface of File Manage

: Go back to the former directory;

: Refresh the current directory;

Firstly, let's explain the function and property of each disk.

Disk C: This system disk includes important system files, such as System Set, FPGA file, Font list file, Play list and so on. The directory of the Disk C can be opened by double clicks, as is shown in Fig 6.9.

FONT: It is the file folder of the font list in Disk C. If there isn't Disk F, the font list will be downloaded to this folder. The capability

of this folder is limited, and the Chinese font list can't be saved in this folder.

FPGA Folder: When the FPGA program is downloaded, this program file will be saved in this FPGA folder.

TEMP Folder: Temporary file folder;

CONFIG.SYS: The files of current system configuration. And all system parameter will be saved in this folder.

DEFAULT.SYS: The defaulted system configuration files;

SEQUENT.SYS: The play list of the current system. The list records the name of the current play files;

LOGO.SYS: Logo display files;

COLORTY.BIN: palette files.

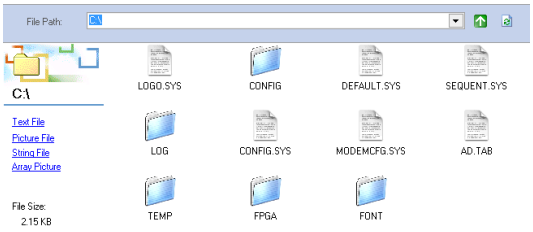


Fig. 6.9 Directory of Disk C

Disk D: Disk D is Flash disk which save the play files of systems. As is shown in Fig 6.10, it is the directory of Disk D.

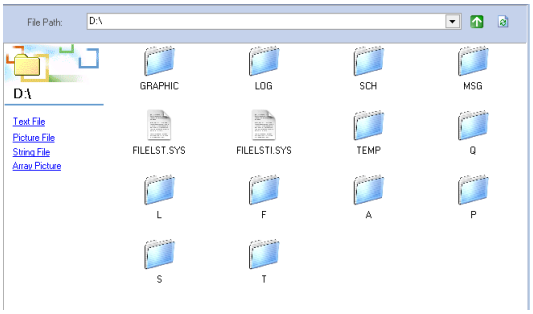


Fig. 6.10 Directory of Disk D

T Folder: It is used to save the NMG file which is edited by Sigma Editor);

S Folder: It is used to save the character string file,

P Folder: It is used to save the BMP picture file. All pictures sent to the main board will be transferred to the picture files of BMP format;

A Folder: It is used to save the PMG file which is edited by True Font Editor;

L Folder: It is used to save the NMG file which is transferred from AVI or GIF file;

TEMP Folder: Temporary file folder;

FILELST.SYS: The list of all files in the disk. And it is different from the list of play files in C disk.

Note: Disk D is Flash disk. If files in Disk D are refreshed often, Disk D will be damaged easily. The lifetime of Disk D is about 100 thousand times rewriting. Therefore, if it needs to refresh the files often, it is suggested change the default disk to be Disk E.

Disk E: This disk is RAM disk, the files in it can be refreshed frequently, and the refresh speed is fast. But after the power is off, the files will be lost. As is shown in Fig 6.11, it is the directory of Disk E. The structure and the folder function of Disk E is same as those of Disk D. But there is no FILELST.SYS file in Disk E.

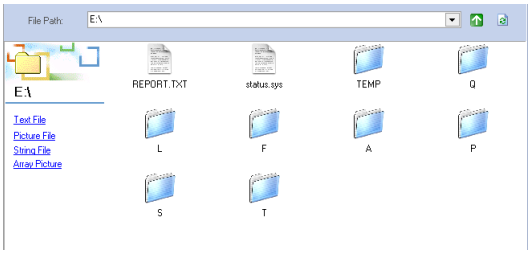


Fig. 6.11 Directory of Disk E

Disk F: Disk F is NandFlash disk or CF or SD Card. The capability of Disk F is very big. As is shown in Fig 6.122, there is FONT folder in the directory of Disk F. This font list folder also is used to save the font list file. And because of its big capability, Disk F can save bigger font list file. Therefore, when the font list file is sent, the control board with Disk F will default to download the file to Disk F, but not Disk C. The function of other files in Disk F is as same as those in Disk D.

LOGFILE.LOG: It is the file recording play log. When the play log is read, this file will be created.

TEMPLOG.LOG: It is the file recording temperature log. It records the temperature of the display.

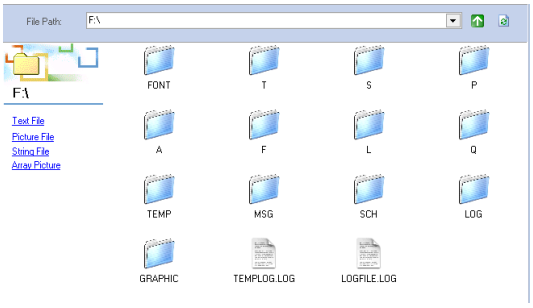


Fig. 6.12 Content of F Disk

Now we can double-click the FONT folder in F Disk, and see the font information in it. There are a lot of font files in the folder, please see Fig. 6.13.

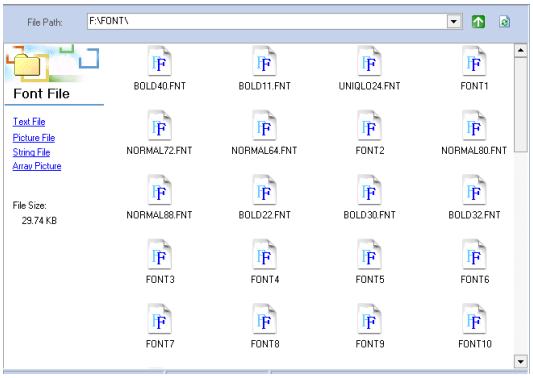


Fig. 6.13 Content of FONT file

Choose one of the font files, click the right key of the mouse and the menu as Fig.6.14 will appear. There are four sub-menus.

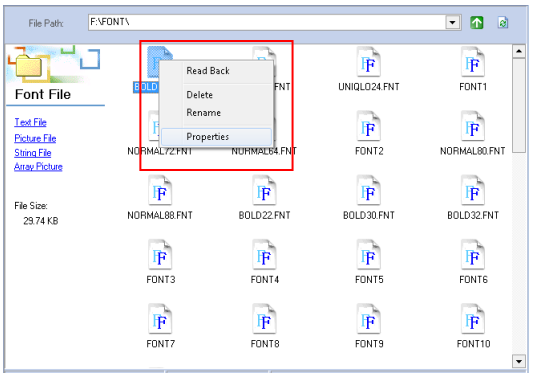


Fig. 6.14 Right-key Menu

Read Back: it can read back the font file to the computer and save it;

Delete: it can delete the font file from the control card of the LED display, and after the file is deleted, that type of font cannot be shown on the display;

Rename: it can re-name that font file. But font files are system files, if they are re-named, the system cannot find them, so please don't re-name them. But other display files like NMG files can be re-named;

Properties: it shows the information such as the size and foundation date of the file, etc. Please see the Fig.6.15, it is the properties of that font file. And users can see the properties of display files too.

In the same way, if you point other files and click the right key of the mouse, the right-key menu will appear. But please don't delete the system files randomly.

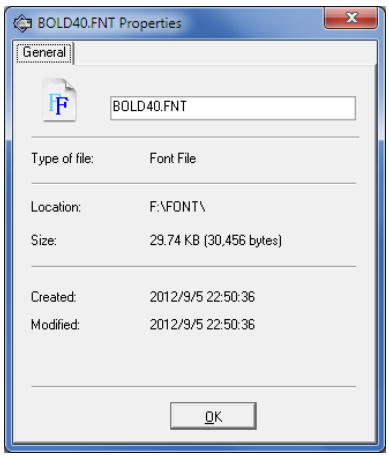


Fig. 6.15 Properties of font

6.5 Net Manage

Net Manage is the management area of 网 the display file and the playlist of the LED display, Using the playlist management panel reasonably is helpful to enhance the efficiency of sending the display files of the LED display.

As shown in fig. 6.16，it is the interface of the playlist management panel, the left part is the playlist management area of LED display, the right part is the display file management area, bottom is the schedule management area.

Fig. 6.16 Playlist management panel

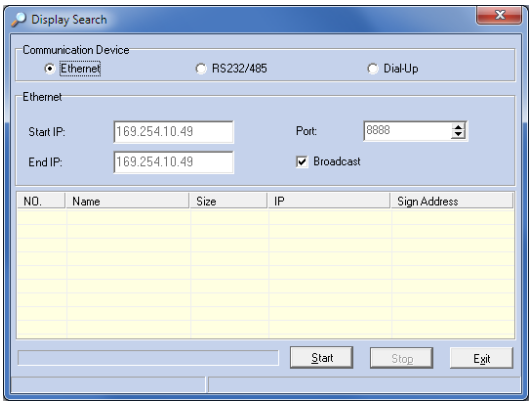
Here are some living examples to show you how to use the functions in the playlist management panel.

① Add group: click

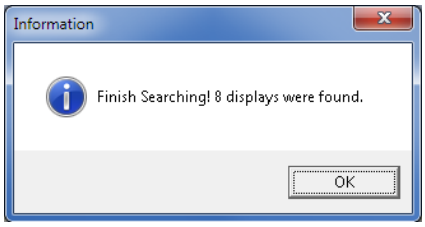
Group name is default. The "Available Signs" area, the left list of the picture above, is empty. How to import parameters of available signs into this area?

Step 1: Click for searching sign;
Step 2: Click to add the searched LED signs to Default Signs. When add group again, the alternative signs will show in Available Signs area.

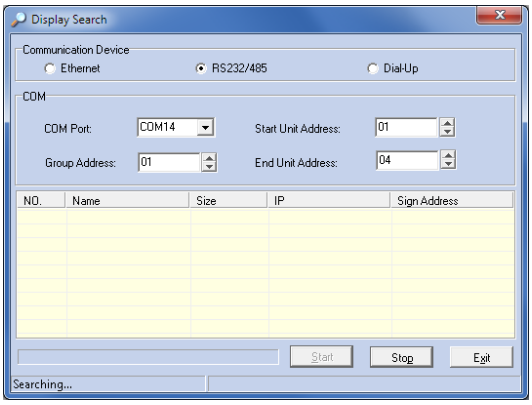
When searching signs, a window is popup. In Communication Device area, three devices are available. As show in the following picture, the Ethernet is used. Type-in Outset IP and Terminated IP, and users can consult the use of port number from chapter 2.



Click "Start" and there are 3 displays in the interface of List Manage. The prompt message says that 3 signs are found.

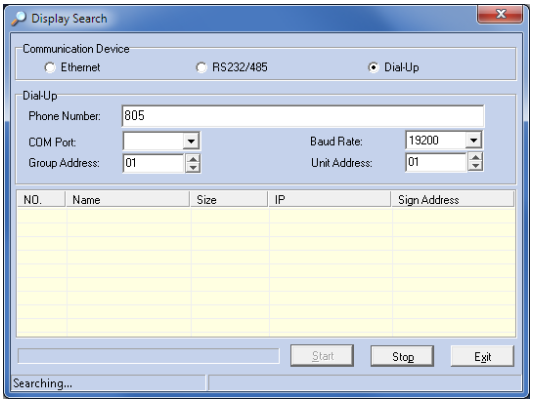


Search signs by using COM: users must ensure that all serial ports communication cables of signs are connected with computer. This method searches signs according to GGUU address of each signs, thus, users have to make sure that each sign is set with a different GGUU address. Signs with a same GG mean signs in the same group, so UU must be different, otherwise the GG must be different.

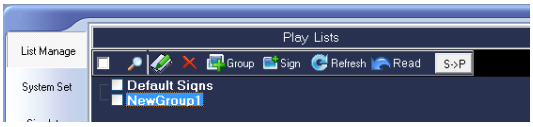


Search signs by using Dial-Up: This is refine research. By this way, users can only search signs one by one and they have to ensure the exactness of all parameters including phone number, computer serial

ports, Baud rate and GGUU address.

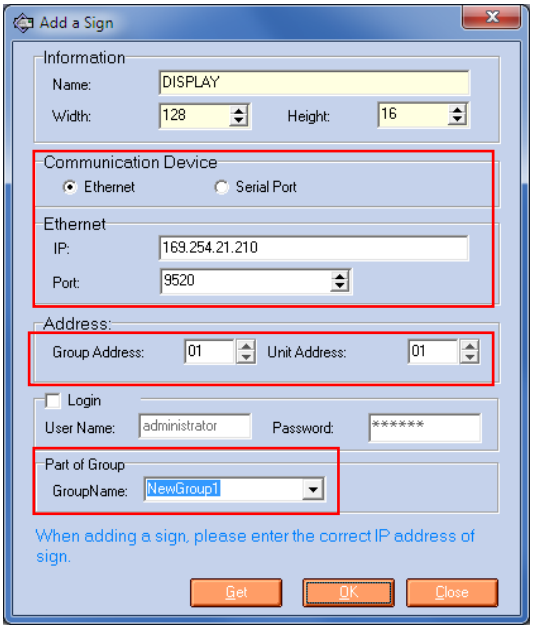


Here add the blank group, click OK. As in the following picture, the New Group is in the list.(Default Signs is default group of this software, cannot be delete and cannot be modified.)



②Add signs: Click

, as in follow picture:



If the sign's control panel has set hardware login, users have to tick the Login and input the password (default passwords is O1a59g).

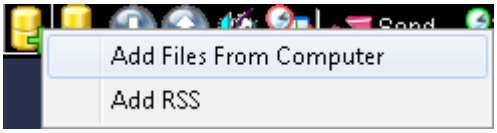
Set communication method of signs on the Add Signs interface. Select NewGroup1 and click

, if Connected, click

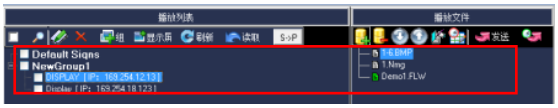
add signs. Users can refresh sign's connection status by clicking

, the unconnected sign is in red. Here add another sign:

③ Add display file: Select NewGroup1, click Choose "Add Files From Computer" as show in the following picture, and select files you want to add. Then you'll see the files in the NewGroup 1.



Select the screen whose IP is 169.254.21.210. Click to add files from computer or the screen like the following picture. In the list, we can see the added group list files in green.



Function button of Add File:

: To delete display file

: To move down display file

: To move up display file

: To edit display file, if the selected file is NMG, the system will open Sigma Editor to edit; if the selected file is PMG, the system will open True Font Editor to edit and if the selected file is BMP, system will open the included photo editor of Windows to edit.

④Set File schedule: File Schedule is for setting the play time of each file to play files chronologically.

For example, set the play time of the first file as 2013-05-03 to 3013-06-03, from Monday to Friday, from 8:00AM to 8:00PM,

the setting process as follows:

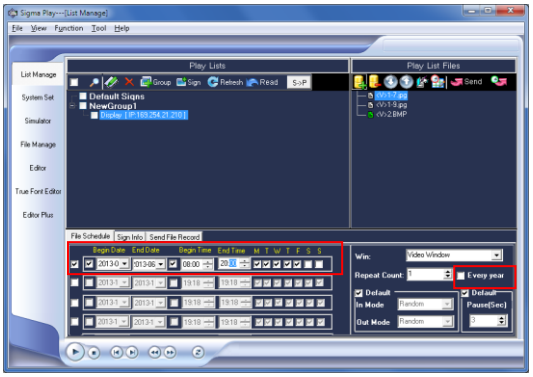
Step 1: Set the date. Tick the Start Date, select 2013-05-03 as the start date and 2013-06-03 as the ending date;

Step 2: Set the hour. Tick the Start Hour, select 8:00 as the start hour and 20:00 as the ending hour.

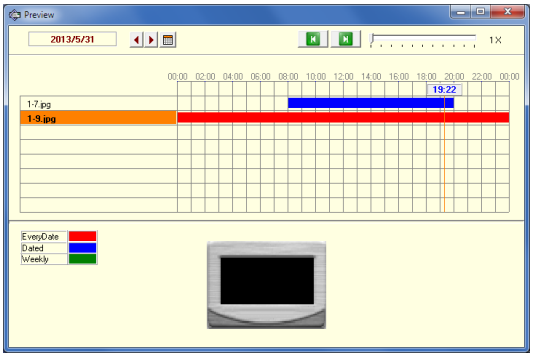
Step 3: Set the week. Cancel the ticks under Saturday and Sunday.

Step 4: Set the play time of other files. Follow the same steps and set the time according to user's schedule.

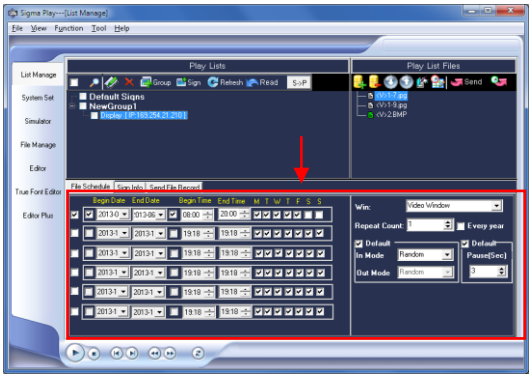
Explanation: if users haven't set time for the file, it is defaulted to play the file all the time. (Note: calibrate the time of the sign in case that there is a delay in playing , or the sign plays in advance, or don't play.)
The scheduling information setting is done,



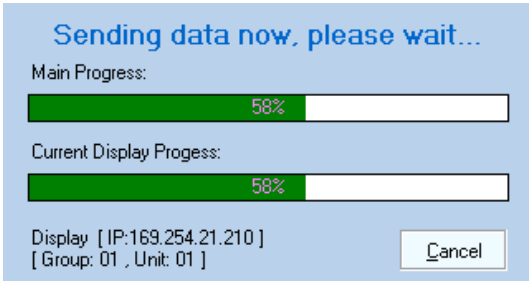
select and users can view and simulate the file's running conditions in each period of time.



Normally, only four scheduling can be seen on the panel. If users want to see more scheduling, drag the segment line pointed by the arrow, as the following picture shows.
Meanwhile, users can preview Scheduling by clicking on it to turn to File Scheduling panel.



⑤Send Play List: send file Scheduling List. Set play time of all files in the list and click button Send to send this list to the sign. Select the check boxes before the screen and Group List, click and send the Play List to the sign.



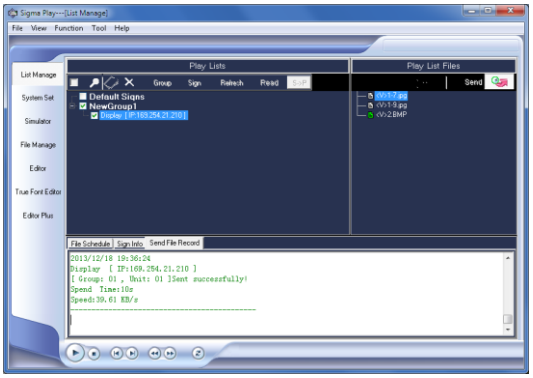
⑥Read back the Play List of the sign: tick the sign's check box that need to read back the Play List, click , as shown in the following picture. The files on the sign are marked in yellow, local files are marked in white, the files which neither on the sign nor in local are marked in red.

⑦Send file at set time: When the content displayed on the sign need to update regularly, users can use this function, for example, send RSS file at set time:

Step 1: Edit files containing RSS with Editor Plus, please refer to Editor Plus User's

Manual.

Step 2: Launch update: Click , then sigma will send files to the sign regularly to update the content of RSS. Sending log can be viewed under Send File Record.



Users can refer to Schedule Send to learn the detail setting.

Note: The allowed maximum of each play list is 128. When the number is larger than 128, the control board can not play the list.

Chapte 7 GPRS Dial-Up Function

Dip switch setting:

For the control board QS5800: The NO. 1 bit switch on SW1 needs to be “ON” status; (indicate that the master board is connected with modem communication)

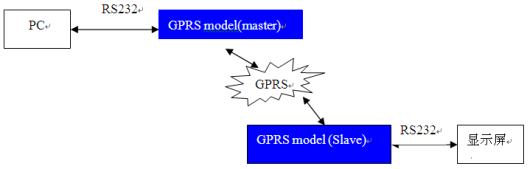
For B. Modena board:

For the B. Modena board: if it connects to QS5800 directly, the NO.1 and NO.2 bit switches on SW2 need to be “ON” status; if it is connected by RS232, the NO.1 switch on SW2 needs to be “OFF” status.

Communication requirement: ① The common parallel RS232 signal cable is OK. One end connect to the modem, another end connect to the COM6 port on the QS5800 control board. ② The signal cable must be crossed RS232 with holes on both sides. One end connect to QS5800 control board, another end connect to computer.

7.1 Point to point connection

Connect GPRS system shown Connect successfully.



Open Sigma3000 software, select tool—Dial-up, enter GPRS model slave SIM card number into “Number to Dial” (area code should be added), select Serial port which connects PC and GPRS model (master) in “COM Port”, select the baud rate of displays in “Baud rate”, see Figure 7.11

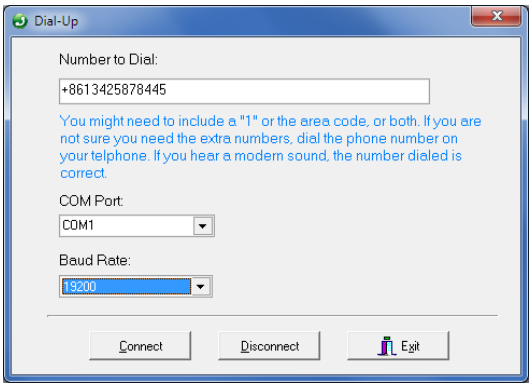

Dial-Up
Number to Dial:
+8613425878445
You might need to include a "1" or the area code, or both. If you are not sure you need the extra numbers, dial the phone number on your telphone. If you hear a modem sound, the number dialed is correct.
COM Port:
COM1
Baud Rate:
19200
Connect
Disconnect
Exit

Figure 7.11

And then click

, you will see a progress box as Figure 7.12

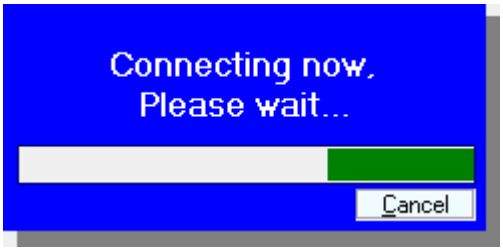


Figure 7.12

If show ’connect successfully’, it means that GPRS system has been connected.

After connection, we can communicate with the displays by this channel. Because we use COM1 to connect them, we can communicate with the displays by only selecting COM1. See Figure 7.13

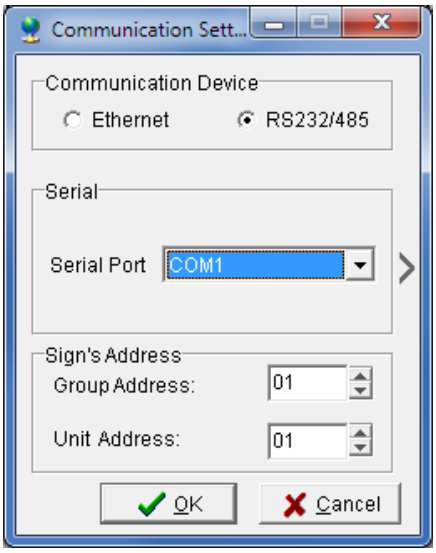


Figure 7.13 selecting COM 1

We can operate the screen after communicating successfully. Finish the operation, we can stop the connection, select Tool----Dial-up, you will see Figure 7.11, and then click

, there is a progress box, you disconnect it.

Notes: We strongly suggest customer use 19200 baud rate for GPRS model. If the baud rate for the Mater board and the Slaver board is the same, the communication will be better. The slaver control board will be adapted the baud rate of the control board inside the LED sign.

If you have changed the baud rate for the main board inside the LED sign, pleased remember to reboot the Slaver GPRS model board and re-dial.

7.2 Connection from Slaver and Master to Server

Follow Figure 7.20, connect GPRS system;

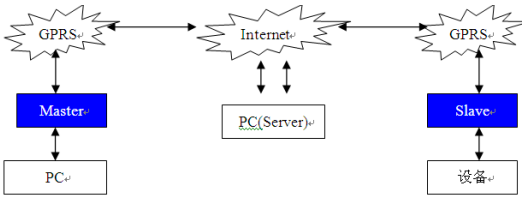


Figure 7.20

First, run a server software VMS SERVER in PC (Server), Follow Figure 7.21

Figure 7.21

And then, open Sigma 3000 in PC, select Toll--- Dial-up, enter SERVER, IP Address, PORTL, Port2, Slave into “Number to Dial”:

SERVER,IP Address,Port1,Port2,Slaver，
SERVER is keyword in command

[IP Address]: the IP Address of server, this command should be used in a system which has only a module, but Server should connect with internet, it means that IP Address is the same as the IP on internet.

Port1 and Port 2 are two monitors, master will connect with Port1, and laver will connect with Port2

Phone number of Slave: SIM card number of slave For example:

SERVER, 219.128.254.187.8761, 8762,+86134258774

Select Serial port which connects PC and GPRS model (master) in “COM Port”, select the baud rate of GPRS model (master) in “Baud rate”, and see Figure 7.22

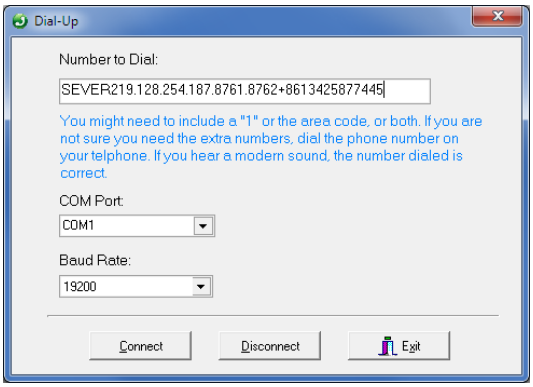

Dial-Up
Number to Dial:
SEVER219.128.254.187.8761.8762+8613425877445
You might need to include a "1" or the area code, or both. If you are not sure you need the extra numbers, dial the phone number on your telphone. If you hear a modem sound, the number dialed is correct.
COM Port:
COM1
Baud Rate:
19200
Connect
Disconnect
Exit

Figure 7.22

Click Connect, appear a progress box as Figure 7.23

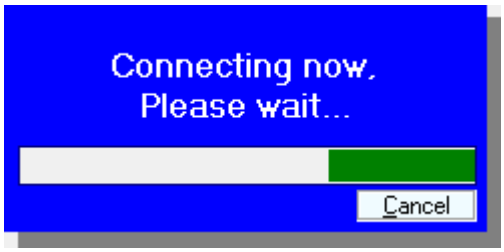


Figure 7.23

If show 'connect successfully', it means that GPRS system has been connected.

After connection, we can communicate with the screen by this channel. Because we use COM1 to connect them, we can communicate with the displays by only selecting COM1. See Figure 7.25

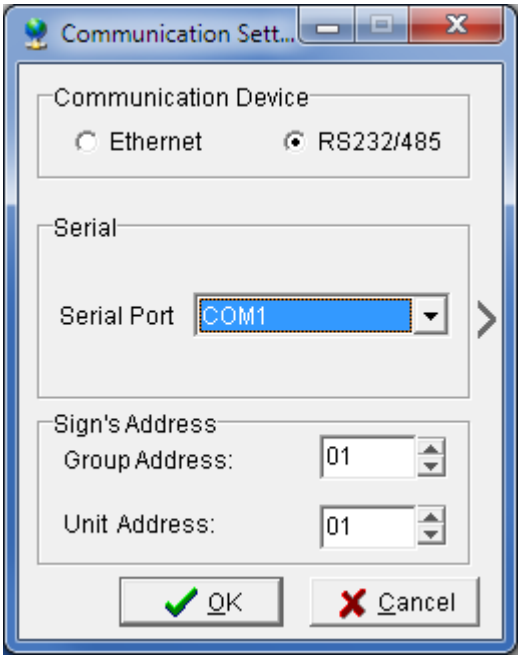


Figure 7.25 Choose COM1

We can operate the screen after communicating successfully. Finish the operation, we can stop the connection, select Tool----Dial-up, you will see Figure 7.11, and then click Disconnect, disconnect it.

Chapter 8 Advanced

First of all, log onto the Sigma Play as the administrator in the way as described in Chapter 1. After you have opened the software, first confirm communication with the LED screen in the way as described in Chapter 5. Then switch to System set interface. Click the button Read, and then press Ctrl+Alt+A. You will see the button Advanced.. at the lower right corner. See Figure 8.01

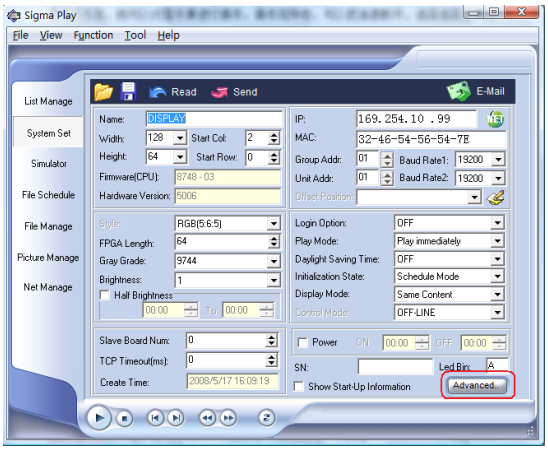
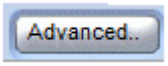


Figure 8.01

Click the button 

, and you will see Figure 8.02；

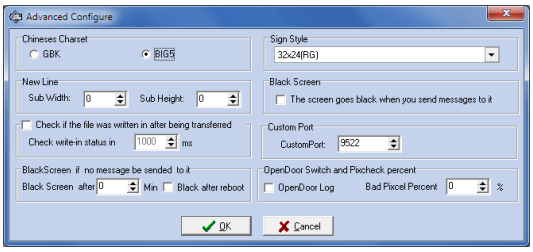
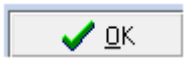
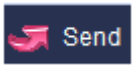


Figure 8.02

1：Selecting Chinese fonts:

Sigma 3000 is based on English characters, please using the Chinese Character if insert the Chinese fonts. Chinese fonts including Sub-simplified Chinese and Traditional Chinese, there are repeated internal code at both characters. So please select one character when you input Chinese fonts.

GBK stand for Sub-simplified Chinese, BIG5 stand for Traditional Chinese. If displays the Traditional Chinese on the sign, please select BIG5, then check in 

, and check in 

in the “System set”,after that ,the screen will be restarted, and default selection is BIG5.

After that, you can send the Traditional Chinese to the screen. There are three Traditional Chinese character in the Sigma: BIG5A_16、BIG5A_24、BIG5A_32. Also you can convert the operating system character with the conversion function in Sigma. Please see the chapter 4.

2: New- line setting

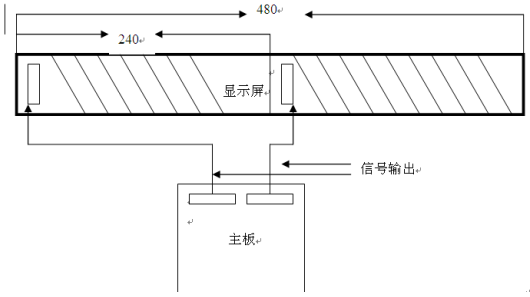
When the screen width is bigger than the maximum displays width which the main board is supported and when the screen height is smaller than the half of maximum displays height which the main board is supported, it can use the new-line to extend.

For example:

LED Screen: W:H= 480：48

Main board: the maximum supported to the LED screen W:H=256:96

Connection:



Software set up：

Then check in

in the “System set”

3. Choose the type of the driver board

The size of the driver board is different from its pitch. For example 10mm (16x16) means the display module is with the pitch of 10mm, which compose 16x16 dots

4. Use radar to set the speed limit

When the LED display is connected to the radar equipment, users can user this setting to set the highest speed limit of the road.

5. Set black screen when sending the message

Users can set if the LED display would go black or not when sending the message file.

6. Users can check if the files is successfully

sent and the sending time of the file.

Chapter 9 Items for Your Attention

1. When you want to use Sigma software to send a file to the sign, please make sure the sign is in Schedule status (display status). If the sign is in remote control status (you can see remote control list), please press “program” key in remote to switch to Schedule status from remote control status; if the sign is in shut down status, please set the sign back to schedule status by press “ESC” button and then “Shift +F1” buttons.； Figure 9.01

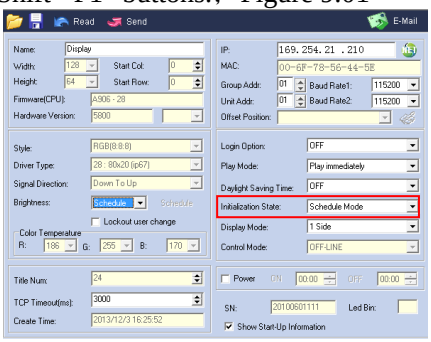


Figure 9.01

2. If you use remote to change the content of file “B” which was received originally from Sigma software before, when you use Sigma software to send file “B” to LED sign, please change the file name or change the display content and then send to the LED sign. Otherwise, the LED sign will not display this file content even you send it to the sign successfully.

3. Some LED screens are built with the CPU board QS5202. In such a case, you can use Sigma 3000 to set single-side or double-side mode.